

WARE

ALUMINUM WINDOWS

RESIDENTIAL MONUMENTAL

WARE AWNING

ECONOWARE AWNING

ECONOWALL AWNING

CASEMENTS

JALOUSIES

MONUMENTAL AWNING

REVERSIBLE

CURTAIN WALLS

ARCHITECTURAL PROJECTED

PAGE

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The exacting, high quality standards set down by management have become the by-word of all Ware personnel. Pride in product and satisfaction of customer are synonymous with success in business under the Ware policy.

Every Ware Aluminum Window manufactured carries a one-year material and workmanship guarantee, which is offered as proof of our pride in product and our desire for customer satisfaction.

And in addition, the Ware Aluminum Windows which have been tested and approved as meeting the Association's specifications, have been awarded the Aluminum Window Manufacturers Association Quality Seal of Approval, a facsimile of which is reproduced on this page.

Ware *quality* Aluminum Windows may be purchased with confidence.

Compare, and you will buy Ware Aluminum Windows.



"A Fine Name in Fenestration"

**KNOWN FOR WEIGHT
ENGINEERING
WORKMANSHIP
BUILT FOR LASTING PERFORMANCE**



James E. Scott Homes, Miami, Florida
Architects: Stewards & Skinner, Rob't Law Weed & Assoc.



Arlington Towers, Arlington, Virginia
Architects: G. V. Stone and D. H. Drayer
Contractor: John McShain, Inc.



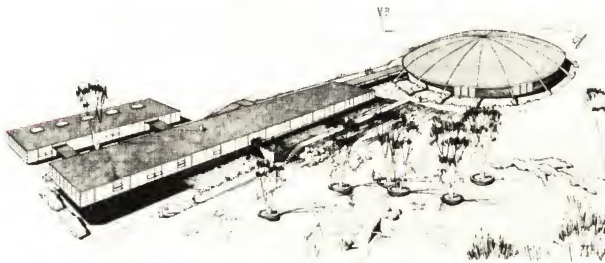
Park LaBrea Development, Los Angeles, California
Owners: Metropolitan Life Insurance Co.
Architects: Leonard Schultze and Associates
Builders: Starrett Bros. And Eken, Inc.

From Coast to Coast and many foreign countries, Ware Laboratories, Inc., takes pride in thousands of installations in residential and monumental construction.

The quality and workmanship of Ware windows found in residences, schools, hospitals, factories, government and office buildings is proof of superior craftsmanship and engineering.



"Jose Marti" National Library, Havana, Cuba
Architects: Govantes y Cabarrocas



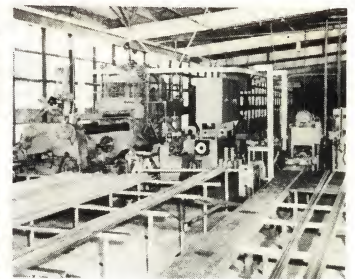
A.&M. Consolidated Senior High School,
College Station, Texas
Architects: Caudill, Rowlett, Scott & Associates
Contractor: Andrews-Parker, Inc.



M.I.T. Auditorium, Cambridge, Mass.
(Massachusetts Institute of Technology)
Architects: Eero Saarinen & Associates
Associate Architects: Anderson & Beckwith
General Contractors: George A. Fuller Co.



Sheridan Shores Apartment, Chicago, Ill.
Architect: Erwin Fredrich, Chicago
Contractor: Welso Construction Co., Chicago



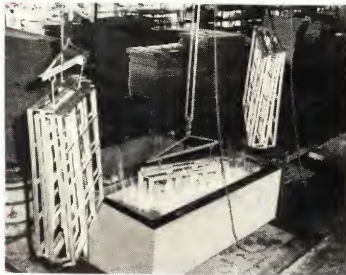
PROGRESS

This new modern extrusion press and heat treating oven is another step in Ware's expansive development program. This modern press enables greater flexibility in stock control and allows for greater versatility of special aluminum shapes to meet architectural requirements.



AVAILABILITY

The above views show part of Ware's on-hand factory stock of standard types and sizes available for immediate delivery to supplement large regional warehouse stocks. Thousands of windows are available for shipment direct from factory or branch warehouses to facilitate customer service.



ACID CLEANED, ETCHED AND LACQUERED

All windows are chemically cleaned. After being washed in a series of tanks they are dipped in lacquer. Dirt and mill grease is removed. The lustrous etched finish is then preserved with lacquer to prevent mortar stains during installation.



PERFORMANCE TESTED

Each new Ware window design is subjected to rigorous weather conditions before production approval. The window is tested for dynamic water and air conditions to determine water and air infiltration. Hurricane winds of 125 mph and over, with 20 gallons of water per minute injected into the air stream are used in these tests.



INTERIOR VIEW

DISTINCTIVE FEATURES

Weatherstripped by Koroseal locked in extruded channel unexposed to weather.

No special locking devices to cause distortion of ventilators and put undue strain on operator.

Wide overlap of weathering members. Minimum outside at jambs 5/16".

No exposed gears — Operator factory sealed in oil.

Operator concealed in sill at factory eliminating on-the-job installation.

Heavy reinforced sill.

Snap-on glazing bead available.

All ventilators of each window equal height and drop for easy cleaning.

All windows chemically cleaned, etched and lacquered per FHA requirements.



FIN TRIM AVAILABLE



CENTER SILL OPERATOR — ADVANTAGES

Operating force at center of sill synchronizing action of heavy duty torque bar at opposite jambs preventing torque lag which requires racking or distortion of ventilators.

Smart tilted crank clears any stool. Does not require adjustment of shaft.

Crank does not protrude in room to interfere with furniture or passage.

No interference with drapes or curtains.

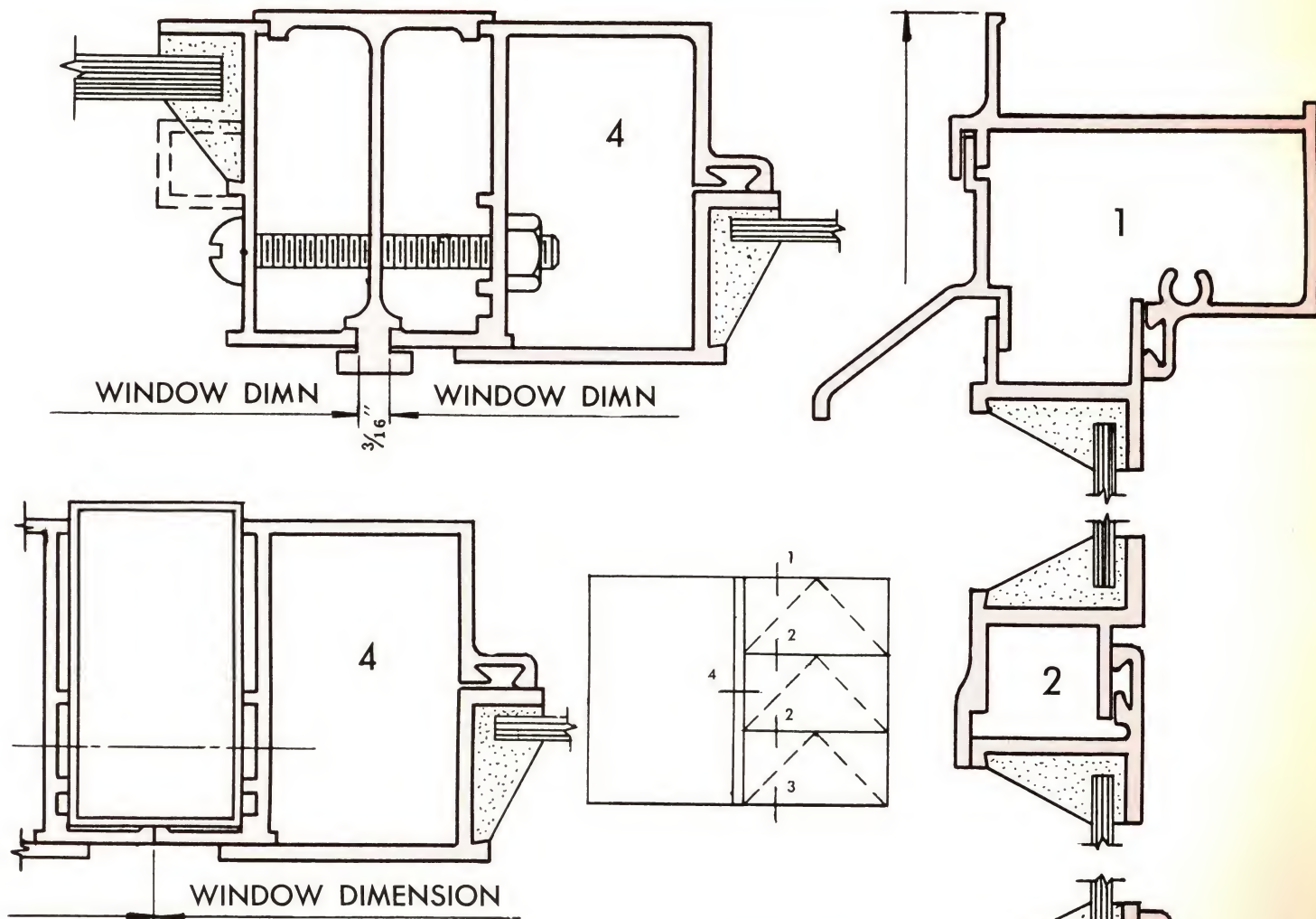
Allows quick positive closing without force.

Eliminates problem of right and left hand operators in floor plans.



EXTERIOR VIEW

LOW AIR INFILTRATION 0.093 CFM under static air pressure equal to 25 mile per hour wind velocity. (Pittsburgh Testing Laboratory).



SPECIFICATIONS

WORK INCLUDED: Windows shall be Ware Awning Type weatherstripped as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operation, appearance and service) and shall be furnished complete with hardware and all standard erection fittings.

MATERIAL: Frames and Ventilators shall be of solid extruded aluminum alloy 635-T5, mill finish. No section of the ventilating member shall be less than 1" deep. At no point shall the frame section be less than 1 7/8" deep. (Commercial tolerances observed.)

The ventilating member shall have a web not less than 3/32" in thickness. Weather drips of extruded aluminum shall be furnished with each window, shipped loose and must be applied to the head member of window frame. The face of the frame extrusions shall extend beyond the buck measurement of the window in such a manner as to provide a 1/2" flange at head, jamb and sill of the exterior face of the window.

CONSTRUCTION: Frame corners shall be assembled with stainless steel sheet metal screws to assure a strong mechanical joint.

Corner members of all ventilators shall be joined to the side rails by mortise and tenoned joints and shall be air-hammer riveted in a satisfactory and workmanlike manner.

Ventilators shall be hung on aluminum pivots.

HARDWARE: Operator shall be center sill type. All internal gears, brackets and power tubes shall be of aluminum or stainless steel or other non-ferrous metal, or if ferrous metal is required, it shall be given a protective coating. The operator housing shall be grease-

tight to protect worm and worm wheel and shall be packed with grease.

Construction of hardware shall be such as to permit a normal operating opening of 70° on all ventilators. All bolts and nuts, screws, washers and hinge pins shall be either aluminum or stainless steel.

PROTECTIVE COATING: All windows shall be chemically cleaned to remove fabrication compounds and dirt accumulations, et cetera, and be given a protective coating of a clear water-white methacrylate lacquer. This lacquer when applied on the aluminum surface must be such as to withstand the action of lime mortar for a period of at least one month at an atmosphere of 100% relative humidity at room temperature.

ERECTION: All openings must be fully prepared to receive the aluminum windows and installation must not be started until all other work around the opening is first completed. The window shall be set plumb and true and imbedded in a water-proof mastic and thoroughly caulked.

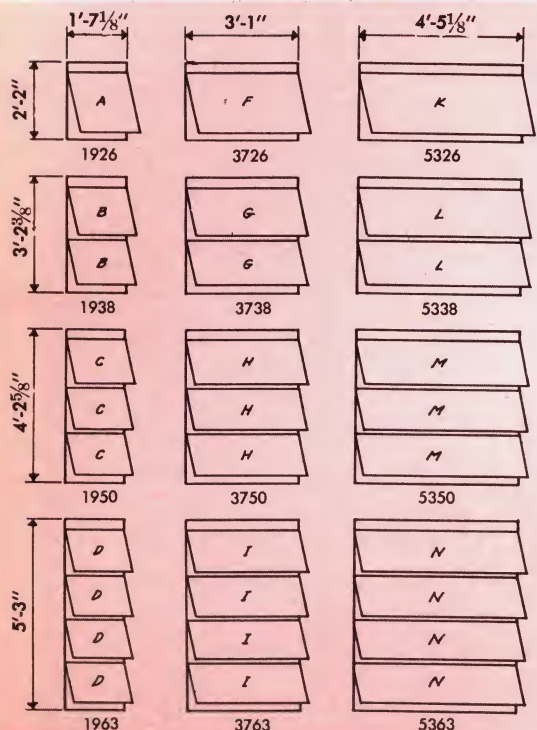
SCREENS: Shall be made of rolled section aluminum frames mitered and joined by aluminum corner angles. Screen cloth shall be 18/14 aluminum mesh and held in place by aluminum splines or other satisfactory material.

GLAZING: All windows shall be glazed on the outside and shall be well back-puttied and then face-puttied. Aluminum sash putty or compound of No. 1 commercial grade shall be furnished and used by the glazier.

WEATHERSTRIPPING: To be of a high grade plastic inset in extruded channel.

WINDOW DIMENSION

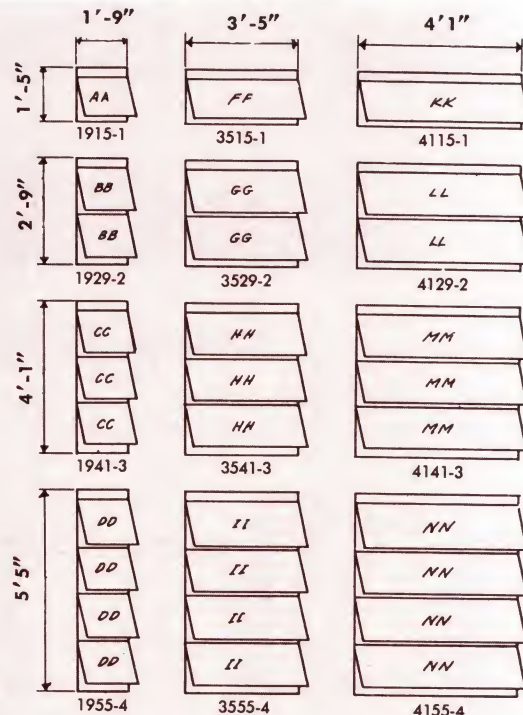
STANDARD SIZES



STANDARD

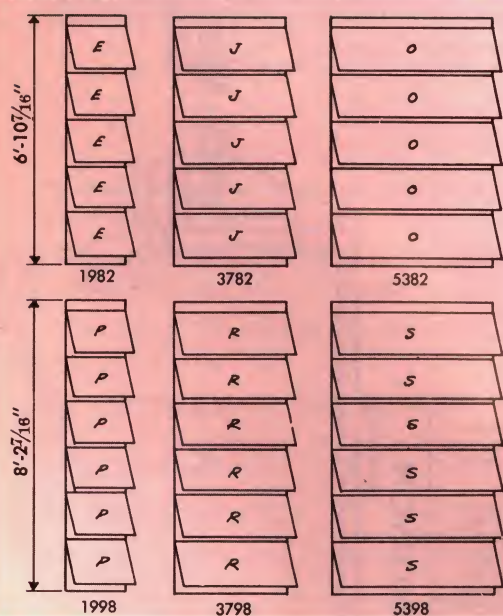
Wind. Type	Glass Ltr.	Glass Size
1926 - A	- 15 3/8"	x 20"
1938 - B	- 15 3/8"	x 15 5/8"
1950 - C	- 15 3/8"	x 14 1/8"
1963 - D	- 15 3/8"	x 13 7/8"
1982 - E	- 15 3/8"	x 14 7/8"
1998 - P	- 15 3/8"	x 14 1/2"
3726 - F	- 33 1/8"	x 20"
3738 - G	- 33 1/8"	x 15 5/8"
3750 - H	- 33 1/8"	x 14 1/8"
3763 - I	- 33 1/8"	x 13 7/8"
3782 - J	- 33 1/8"	x 14 7/8"
3798 - R	- 33 1/8"	x 14 1/2"
5326 - K	- 49 3/8"	x 20"
5338 - L	- 49 3/8"	x 15 5/8"
5350 - M	- 49 3/8"	x 14 1/8"
5363 - N	- 49 3/8"	x 13 7/8"
5382 - O	- 49 3/8"	x 14 7/8"
5398 - S	- 49 3/8"	x 14 1/2"

MODULAR SIZES



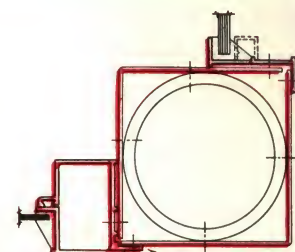
The above standard sizes carried as stock items in all warehouses. Window sizes noted below fabricated on special order.

Modular sizes shown above carried as stock in factory only. Sizes noted below fabricated on special order.

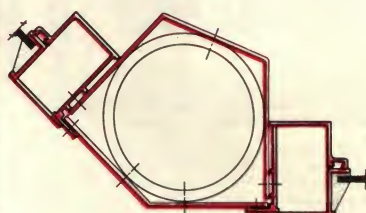


MODULAR

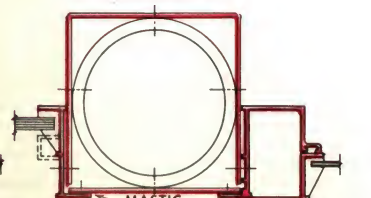
Wind. Type	Glass Ltr.	Glass Size
1915-1 - AA	- 17 1/8"	x 11"
1929-2 - BB	- 17 1/8"	x 12 1/8"
1941-3 - CC	- 17 1/8"	x 13 5/8"
1955-4 - DD	- 17 1/8"	x 13 1/8"
1969-5 - EE	- 17 1/8"	x 14 1/8"
1981-6 - PP	- 17 1/8"	x 14 1/4"
3515-1 - FF	- 37 1/8"	x 11"
3529-2 - GG	- 37 1/8"	x 12 1/8"
3541-3 - HH	- 37 1/8"	x 13 5/8"
3555-4 - II	- 37 1/8"	x 13 1/8"
3569-5 - JJ	- 37 1/8"	x 14 1/8"
3581-6 - RR	- 37 1/8"	x 14 1/4"
4115-1 - KK	- 45 1/8"	x 11"
4129-2 - LL	- 45 1/8"	x 12 1/8"
4141-3 - MM	- 45 1/8"	x 13 5/8"
4155-4 - NN	- 45 1/8"	x 13 1/8"
4169-5 - OO	- 45 1/8"	x 14 1/8"
4181-6 - SS	- 45 1/8"	x 14 1/4"



WINDOW DIMN. MASTIC
COVER PLATE FOR 90° MULLION



MASTIC WINDOW DIMN.
COVER PLATE FOR 135° MULLION

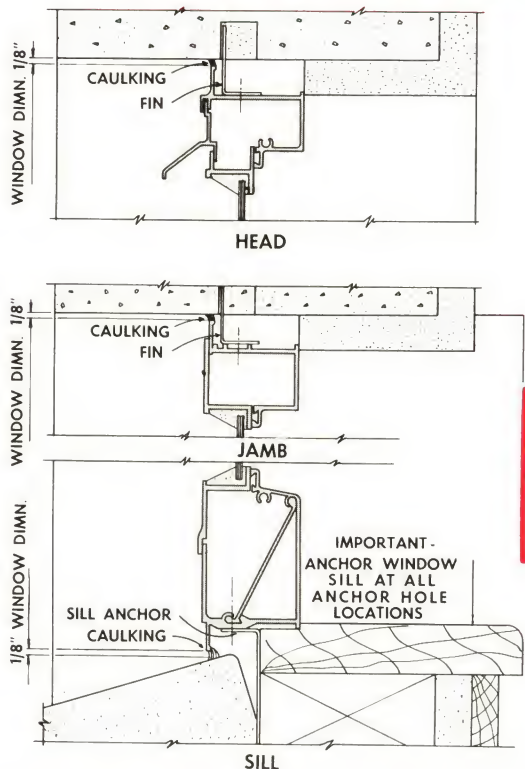


MASTIC MULL. DIMN. WINDOW DIMN.
COVER PLATE FOR 180° MULLION

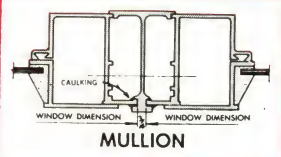
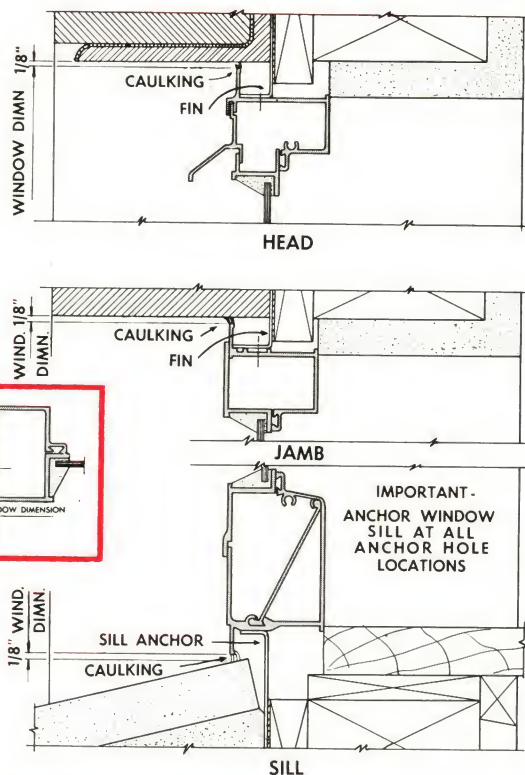


STORM WINDOW

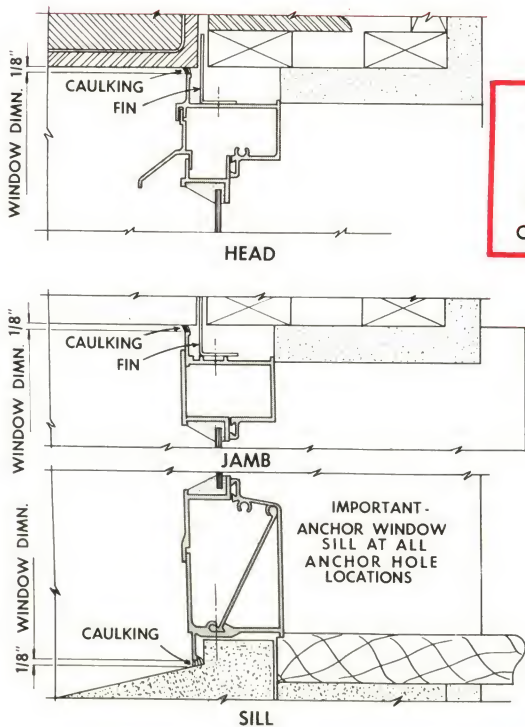
CONCRETE OR CONCRETE BLOCK



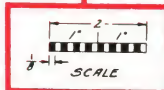
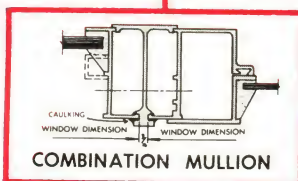
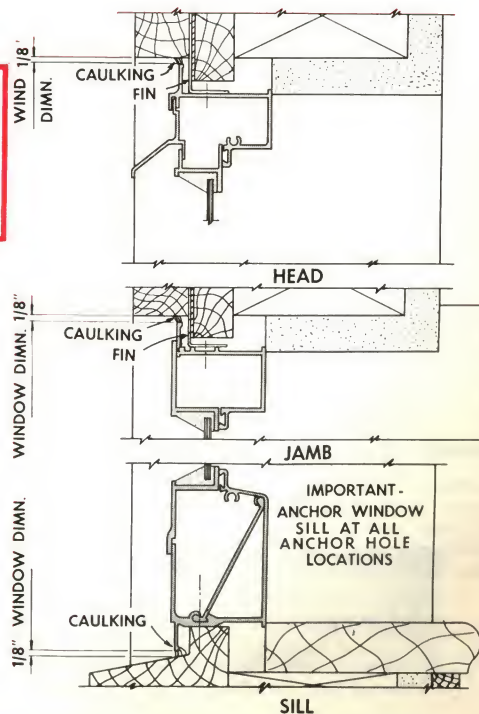
BRICK VENEER



SOLID BRICK

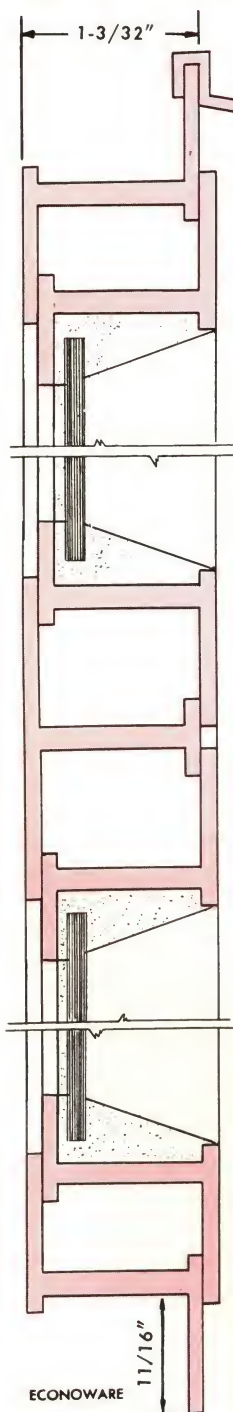


FRAME



Full scale details on request.

Econ-O-Ware awning windows



The Econ-O-Ware Aluminum Awning Window is the first in the series of windows developed by Ware Laboratories to be mass produced and sold in a price range that would permit the project builder to give the utmost in quality and still stay within the confines of a project building budget. The premise that it was possible to design a functionally perfect, low-cost, high-quality window, has been more than justified by the wide acceptance of these units. Users recommend their neat appearance, ease of installation and operation, and, of course, their permanence.

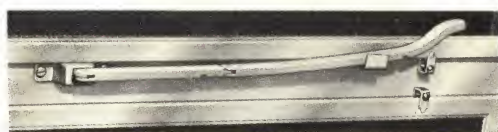
distinctive features

- Underscreen operator — Complete screen protection
- Positive locking
- All-weather protection of an awning window
- Attractive horizontal sight lines
- Variable sizes and mullion combinations
- Selective ventilation — Ventilators operate separately
- All corners electrically flash welded
- Seals tight with leverage — Ventilators controlled at center prevent distortion, permitting even weathering
- Trouble free — Simplicity of design —
- Stainless steel bushings
- Controlled ventilation

CASINGS AND FIN TRIM AVAILABLE



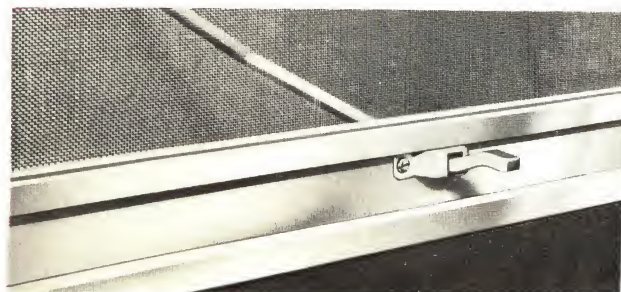
Typical Econ-O-Ware installations



Ware-O-Matic Push Bar, fully closed and locked.



Ware-O-Matic Push Bar, half open and locked.



Ware-O-Matic Push Bar, in fully open position.

SOME POSSIBLE COMBINATIONS FOR LOW COST ALUMINUM FENESTRATION

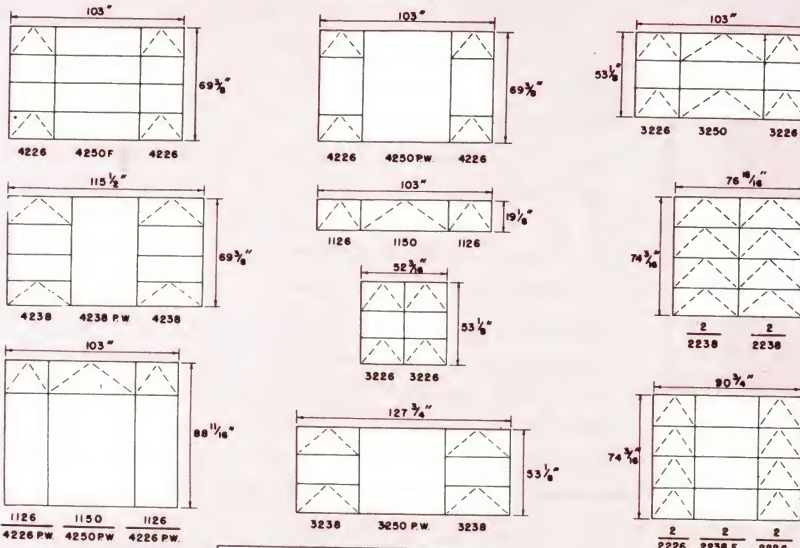
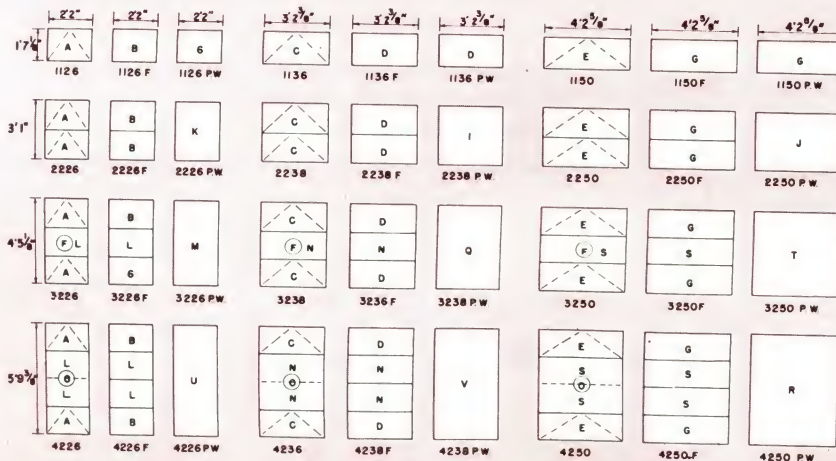
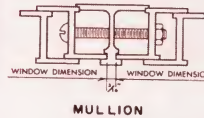
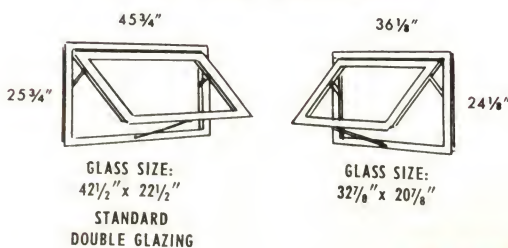


TABLE OF GLASS SIZES											
A	22 3/4 x 15 1/8	I	36 3/8 x 35	Q	36 3/8 x 51 1/8						
G	24 x 17 1/8	J	48 3/8 x 35	R	46 3/8 x 67 3/8						
C	35 3/8 x 15 1/8	K	24 x 35	S	46 3/8 x 15 1/8						
D	36 3/8 x 17 1/8	L	24 x 15 1/8	T	46 3/8 x 51 1/8						
E	47 3/8 x 15 1/8	M	24 x 51 1/8	U	24 x 67 3/8						
G	46 3/8 x 17 1/8	N	36 3/8 x 15 1/8	V	36 3/8 x 67 3/8						



NOTES
 AVAILABLE ONLY IN SIZES AND TYPES SHOWN ABOVE
 (F) INDICATES FIXED
 (O) INDICATES OPTIONAL MUNTIN-STATE IF MUNTIN OMITTED (MO) WHEN ORDERING
 ALL VENTS OUTSWINGING ONLY

PANEL WALL VENTILATORS



STORM WINDOWS



WORK INCLUDED: Windows shall be Ware "Econ-O-Ware" Aluminum Awning Type windows as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operations, appearance and service), and shall be furnished complete with hardware.

MATERIAL: Frames, ventilators and muntin members shall be of solid extruded aluminum alloy 63S-T5, mill finish not less than 1 3/32" deep. (Commercial tolerances observed.)
 The ventilators shall have a 3/32" projection running around the perimeter of each vent which shall be incorporated as a putty glazing stop.

CONSTRUCTION: The corners of the frame and ventilator members shall be mitered and joined by electric flash welding only, and methods which introduce other materials, or where flux is used, will not be permitted.
 Muntins and meeting rail bars shall be tenoned and air-hammer riveted to the frame section.
 Only horizontal muntin bars will be included and shall have a depth of 1 3/32" and shall have a sight line which will approximate the horizontal sight line at the point where ventilator sill bar and meeting rail engage in a closed position.
 Ventilators shall be hung on aluminum fastenings with pins of aluminum, stainless steel or other non-ferrous material.

HARDWARE: Shall consist of a jointed Ware-O-Matic aluminum push bar jointed in such a manner as to permit the bar to be folded back against the meeting rail or frame sill bar section adjacent to the bottom of the ventilator when the window is in either a half open or fully closed position. The push bar shall be constructed in such a manner as to avoid scraping any normal width sill (6 1/2"). The Ware-O-Matic push bar, when drawn over the push bar stop and interlocked in the keeper, shall provide a positive lock against opening the window from the outside.
 All hardware shall be of substantial construction and uniform pattern and shall be of aluminum, stainless steel or other non-ferrous materials.

ERECTION: All openings must be fully prepared to receive the aluminum windows, and installation must not be started until all other work around the opening is first completed. The window shall be imbedded in caulking compound and shall be set plumb and true.
 All ventilators shall be adjusted before glazing for smooth operation and tight contact and the hardware shall be installed before glazing.

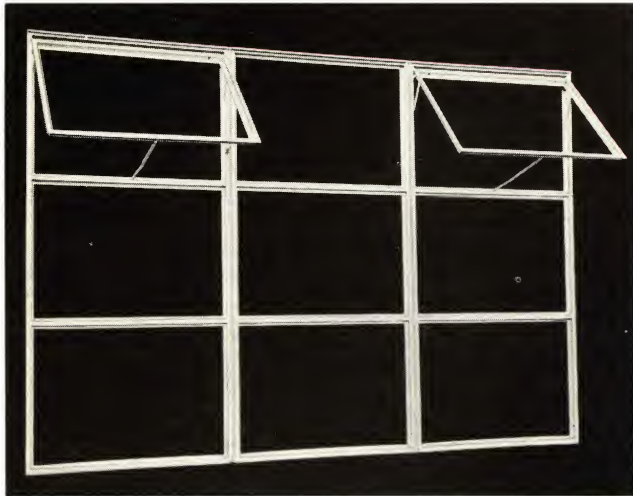
SCREENS: Shall be made of rolled section aluminum frames .781 inches by .437 inches mitered and joined by concealed aluminum corner angle. Screen cloth shall be 18/14 mesh aluminum wire, held in place by aluminum splines or other satisfactory material.

GLAZING: All windows shall be glazed on the outside and shall be well back-puttied and then face-puttied. Aluminum sash putty of No. 1 commercial grade shall be furnished and used by the glazier. Use of glazing clips shall be optional.

PROTECTIVE COATING: Chemically cleaned and lacquered per FHA specifications.

SEE PAGE 16 FOR INSTALLATION DETAILS

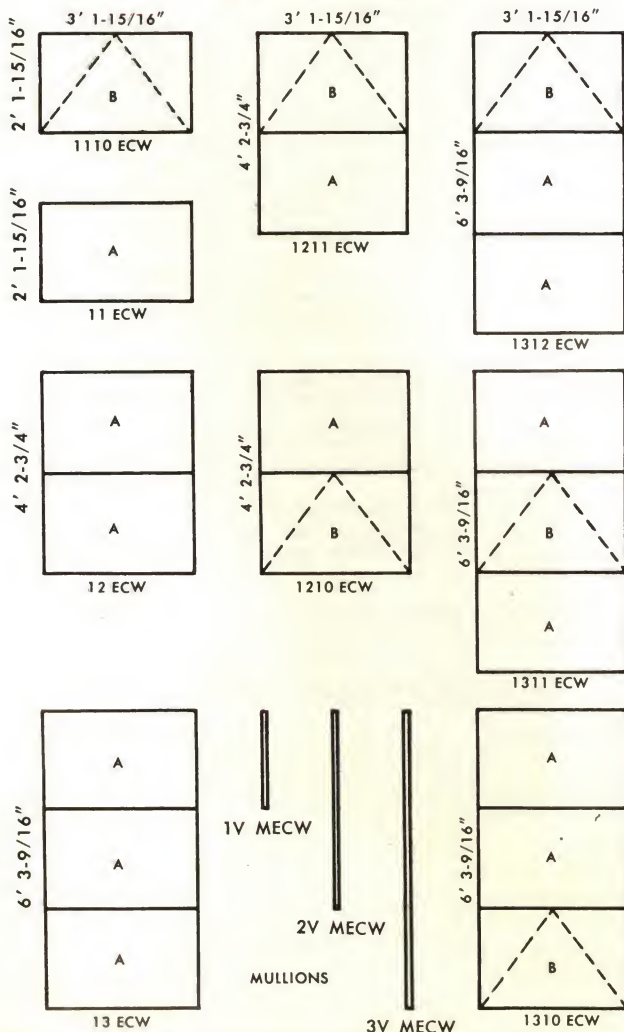
Econ-O-Wall awning windows



A modern window designed for modern living

- **ECONOMY**
- **VARIABLE VENT ARRANGEMENT**
- **STANDARD THERMOPANE OR EQUAL THROUGHOUT**
- **SPECIAL GLAZING ADAPTERS NOT NEEDED**

STOCK SIZES



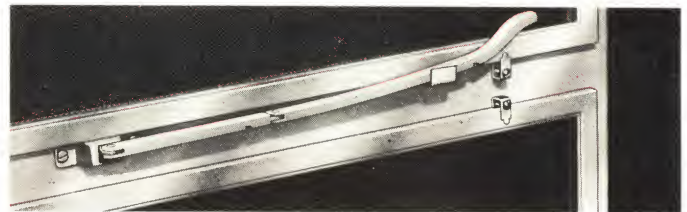
NOTE: Add 3/16" to width for each mullion used.

Ware Econ-O-Wall Awning Windows bring new beauty with economy to the modern home.

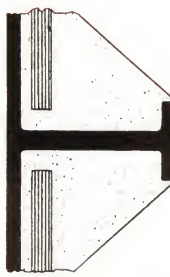
From nine standard sizes almost unlimited combinations can be made with variable vent arrangements. Many of these possible combinations are shown on the next page. It is truly a window where a choice of ventilation and sizes can be given your customer without additional cost.

Each vent is equipped with a Ware-O-Matic under-screen operator offering complete screen protection. The simplicity of the window minimizes maintenance and insures easy installation. Excellent weathering with leverage and positive locking is established by design.

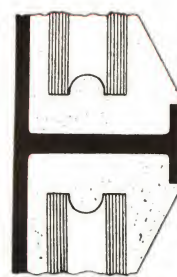
The single or smaller mulled combinations are attractive, functional, low cost units. Their use is practical in the home as a prime window. The larger combinations enhance the home where light, expansive vision with ventilation are desired.



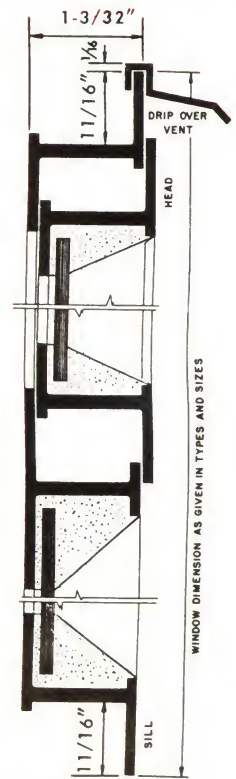
- Complete screen protection (Under screen operators)
- Positive Locking — Trouble-free performance
- Highly weathertight — Seals tight with leverage



SINGLE GLAZING



DOUBLE GLAZING



glass sizes

1/2" Thermopane or equal		
A	36	x 24
B	34 1/16	x 22 1/16
D.S. glass		
A	36	x 24 1/8
B	34 1/16	x 22 1/16

Standard stock sizes for individual use, or, in combinations shown on next page.

SPECIFICATIONS

WORK INCLUDED: Windows shall be Ware "Econ-O-Wall" Aluminum Awning Type windows as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operation, appearance and service), and shall be furnished complete with hardware.

MATERIAL: Frames, ventilators and muntin members shall be of solid extruded aluminum alloy 63S-T5, mill finish not less than 1 $\frac{3}{32}$ " deep. (Commercial tolerances observed.)

The ventilator shall have a $\frac{3}{32}$ " projection running around the perimeter of each vent which shall be incorporated as a putty glazing stop.

CONSTRUCTION: The corners of the frame and ventilator members shall be mitered and joined by electric flash welding only, and methods which introduce other materials, or where flux is used, will not be permitted. Muntins and meeting rail bars shall be tenoned and air-hammer riveted to the frame section.

Only horizontal muntin bars will be included and shall have a depth of 1 $\frac{3}{32}$ " and shall have a sight line which will approximate the horizontal sight line at the point where ventilator sill bar and meeting rail engage in a closed position.

Ventilators shall be hung on aluminum fastenings with pins of aluminum, stainless steel or other non-ferrous material.

HARDWARE: Shall consist of a jointed Ware-O-Matic aluminum push bar jointed in such a manner as to permit the bar to be folded back against the meeting rail or frame sill bar section adjacent to the bottom of the ventilator when the window is in either a half open or fully closed position. The push bar shall be constructed in such a manner as to avoid scraping any normal width sill (6 $\frac{1}{2}$ "). The Ware-O-Matic push bar, when drawn over the push bar stop and interlocked in the keeper, shall provide a positive lock against opening the window from the outside.

All hardware shall be of substantial construction and uniform pattern and shall be of aluminum, stainless steel or other non-ferrous materials.

ERECTION: All openings must be fully prepared to receive the aluminum windows, and installation must not be started until all other work around the opening is first completed. The window shall be imbedded in caulking compound and shall be set plumb and true. All ventilators shall be adjusted before glazing for smooth operation and tight contact and the hardware shall be installed before glazing.

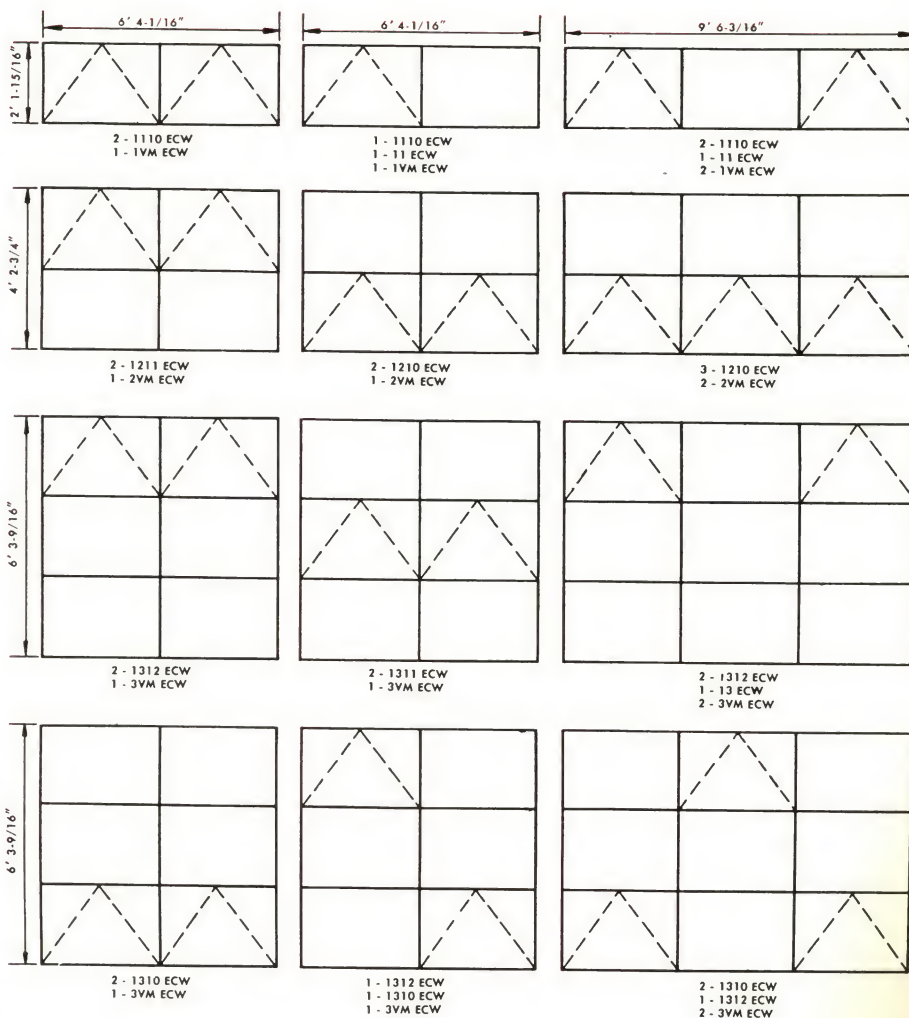
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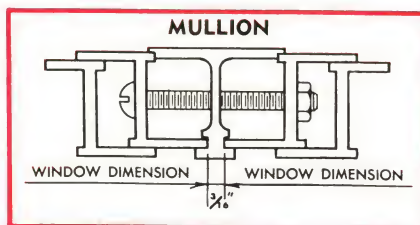
NOTE: To obtain units above and other variable combinations order the component stock sizes and assemble in the field.

PROTECTIVE COATING: Chemically cleaned and lacquered per FHA specifications.

Suggested combinations showing overall dimensions



Made from standard Econ-O-Wall windows & mullions



NOTE

TO OBTAIN UNITS ABOVE AND OTHER VARIABLE COMBINATIONS ORDER THE COMPONENT STOCK SIZES AND ASSEMBLE IN THE FIELD.

MORE LIGHT — MORE VENTILATION — MORE BEAUTY

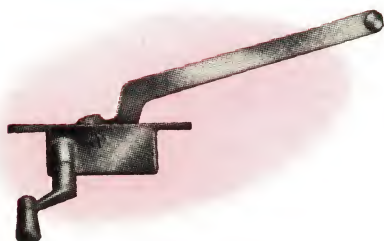
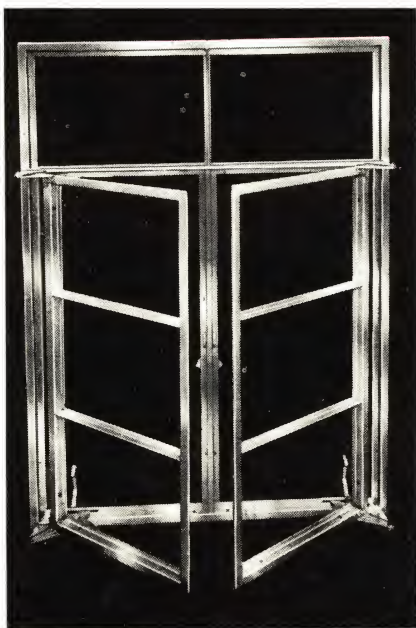
EXPANSIVE VISION AND LIGHT OF A PICTURE WINDOW
VENTILATION WITH ALL WEATHER PROTECTION
ARCHITECTURAL ENHANCEMENT — HORIZONTAL LINES

ENGINEERED FOR ECONOMY AND PERFORMANCE
FOR RESIDENTIAL, COMMERCIAL & INSTITUTIONAL CONSTRUCTION

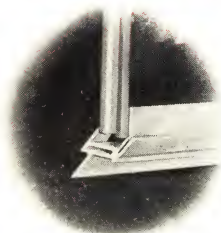
AVAILABLE:

● STORM SASH ● CASINGS AND FIN TRIM

SEE PAGE 16 FOR INSTALLATION DETAILS



Roto (cranktype) Operators provide the opening and closing power of the window. A few deft turns of the handle open the ventilator to the maximum or securely close and weather the window.



Further proof of Ware engineering excellence is portrayed in this modern application of an Aluminum Picture Window designed for double glazing. The Thermopane or Twindow glass is installed from the inside and is positively secured with an aluminum snap-in glazing bead.

The use of Ware Aluminum Casement Windows is the economical method of solving your building problems. They are economical to buy and economical to maintain. The silvery beauty and architectural harmony will endure a lifetime. The extreme depth and weight of the sections provides the user with far more strength and functional quality than can be purchased anywhere at a comparable price. Flash welded corners and extra tensile strength aluminum, affords the user of quality synonymous with the WARE name.

economical

Ware Aluminum Casement Windows are "economy minded." Your first cost is your last cost. The coating of methacrylate lacquer eliminates any marring of the extrusion during construction of the building. The use of aluminum windows eliminates the costly painting operation forever. Ware aluminum casement windows make satisfied home owners.



Extra-strong 1 3/32" extruded sections stand up under heavier loads and usage.



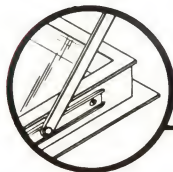
Extra-sturdy ventilator web is 3/16" thick provides greater strength and stiffness to prevent binding, and to make possible tighter closing.



The broad faces of the Ware-vented sections assure maximum protection against weather thru greater metal-to-metal contact.

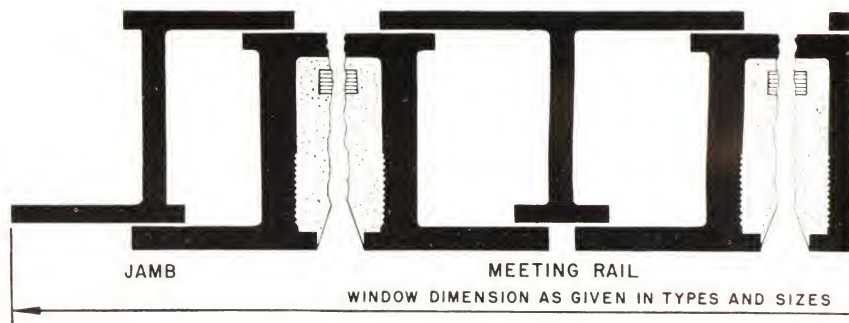


Serrations in metal to retain putty are another maintenance-savings feature! Putty adheres easily—stays firmly in place.



No channel rusting! Stainless steel channel for operator arm eliminates rust and maintenance worries in all climates.

**SMOOTH PRECISION CORNERS
ELECTRICALLY FLASH WELDED FOR STRENGTH
LUSTROUS CHEMICAL FINISH FOR BEAUTY
FHA LACQUER SPECIFICATIONS
STAINLESS STEEL PARTS FOR RUGGED WEAR**



Compare, and you will buy

CASINGS AND FIN TRIM AVAILABLE

specifications

WORK INCLUDED: Windows shall be Ware Aluminum Casements as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operation, appearance and service), and shall be furnished complete with hardware and all erection fittings.

MATERIAL: Frames, Ventilators and Muntin members shall be of solid extruded aluminum alloy 63S-T5, mill finish, not less than $1\frac{3}{32}$ " deep. (Commercial tolerances observed.)

The ventilator member shall have a web not less than $\frac{3}{16}$ " in thickness and both the ventilator and muntin members shall have the exclusive Ware Putty Retaining Feature on surfaces adjoining glazing areas.

Weather drips of extruded aluminum shall be furnished over all full height ventilators, shipped loose and to be applied to the top member of window frame prior to installation.

CONSTRUCTION: Corners of frame and vent bars shall be mitered and joined by electric flash welding only, and methods which introduce other materials, or where flux is used, will not be permitted.

Muntins and meeting rail bars shall be tenoned and air-hammer riveted to frame or ventilator sections.

Horizontal and vertical muntin bars shall be mortised at intersecting points so as to interlock, and shall be firmly secured in place. The over-all depth of the material at the joint shall be $1\frac{3}{32}$ ".

Ventilators shall be hung on aluminum hinges with pins of stainless steel or other non-ferrous materials.

HARDWARE: Shall consist of locking handles and Roto controls of zinc or aluminum die cast, or bronze with baked aluminum finish. All hardware shall be of substantial construction and uniform pattern, and shall be non-ferrous or stainless steel. Fins of galvanized steel shall be furnished at extra cost where desired for building into masonry walls. Fins to receive one coat of Bituminous Asphalt paint at point of contact with the window frame (this painting furnished by others). Fins shall be bolted to the aluminum frames with aluminum bolts and nuts as furnished by the manufacturer.

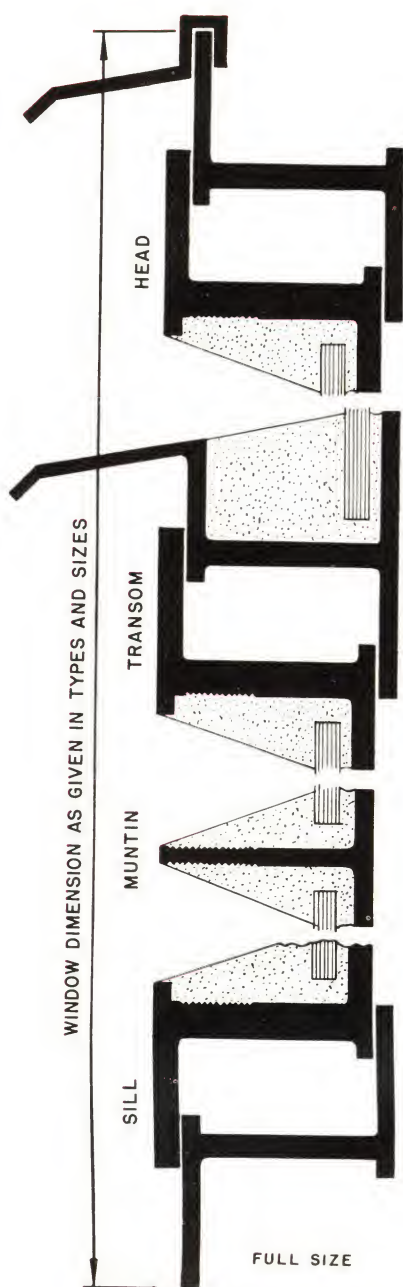
ERECTION: All openings must be fully prepared to receive the aluminum windows, and installation must not be started until all other work around the opening is first completed. The windows shall be imbedded in caulking compound, and shall be set plumb and true.

All vents shall be adjusted before glazing for smooth operation and tight contact, and hardware shall not be applied until after painting of building is completed.

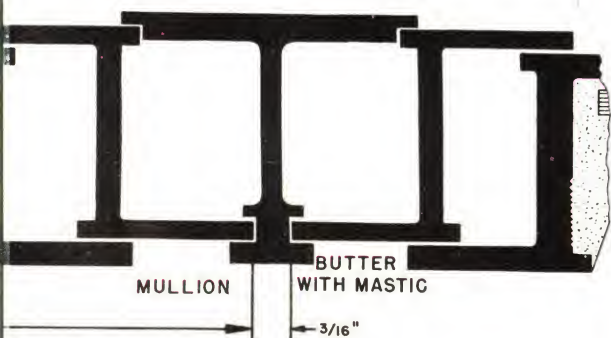
SCREENS: Shall be made of extruded aluminum frames $\frac{3}{4}$ " by $\frac{5}{16}$ " mitered and riveted at the corners, and/or rolled section aluminum frames .781" x .437" mitered and joined by a concealed aluminum corner angle. Screen cloth shall be 18/14 mesh aluminum wire, held in place by aluminum splines or other satisfactory material.

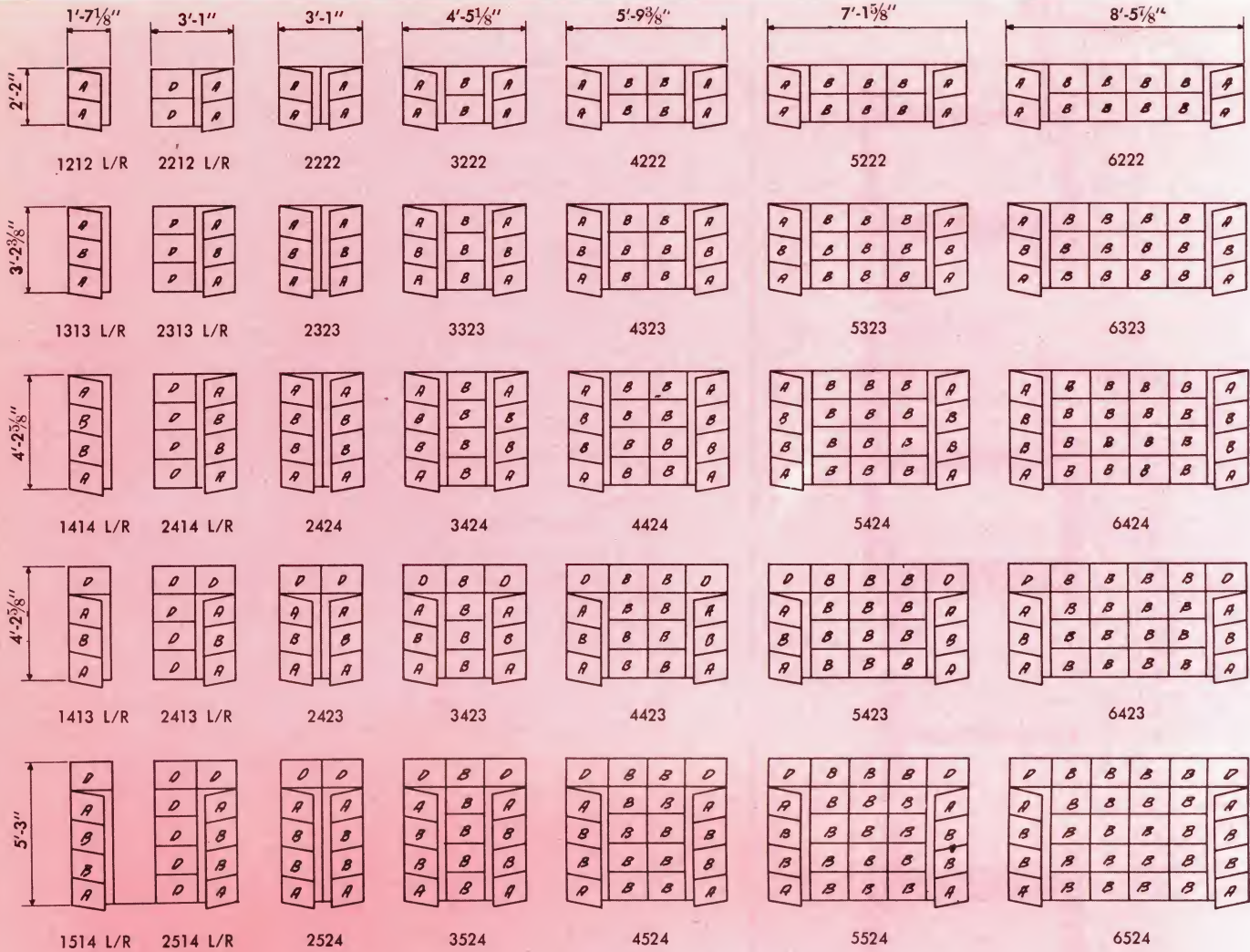
GLAZING: All windows shall be glazed on the outside and shall be well back-puttied and then face-puttied. Aluminum sash putty of number one commercial grade shall be furnished and used by glazier. Use of glazing clips shall be optional.

PROTECTIVE COATING: Chemically cleaned and lacquered per FHA specifications.

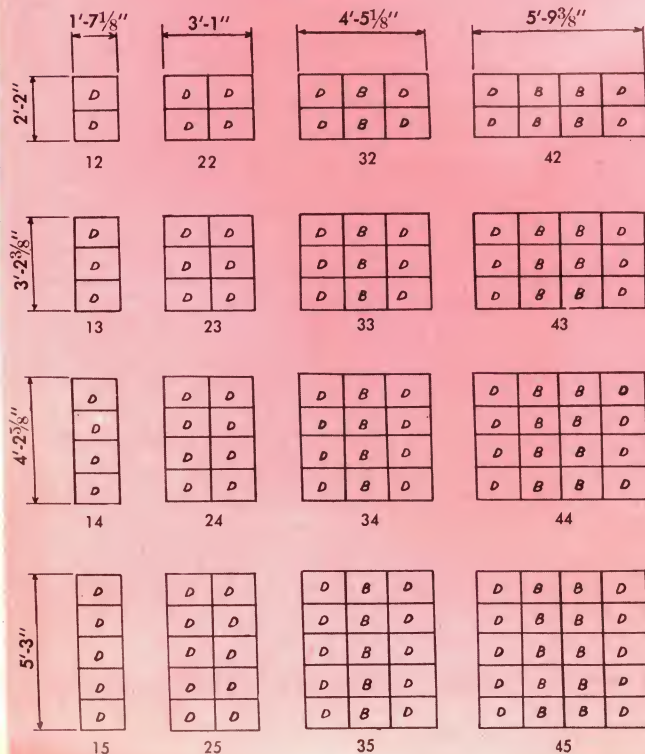


VERTICAL SECTION



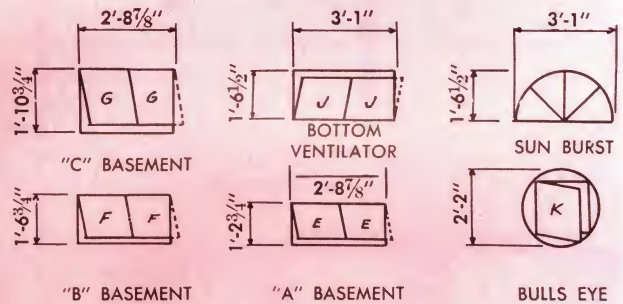


FIXED FRAMES

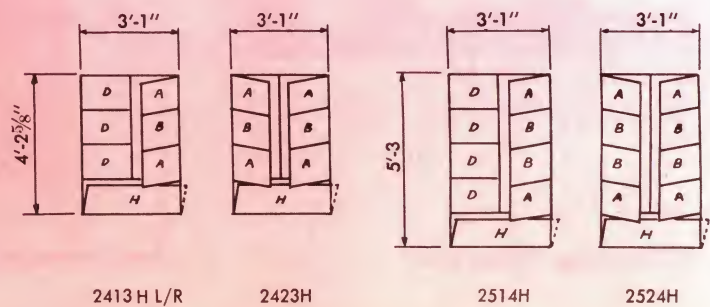


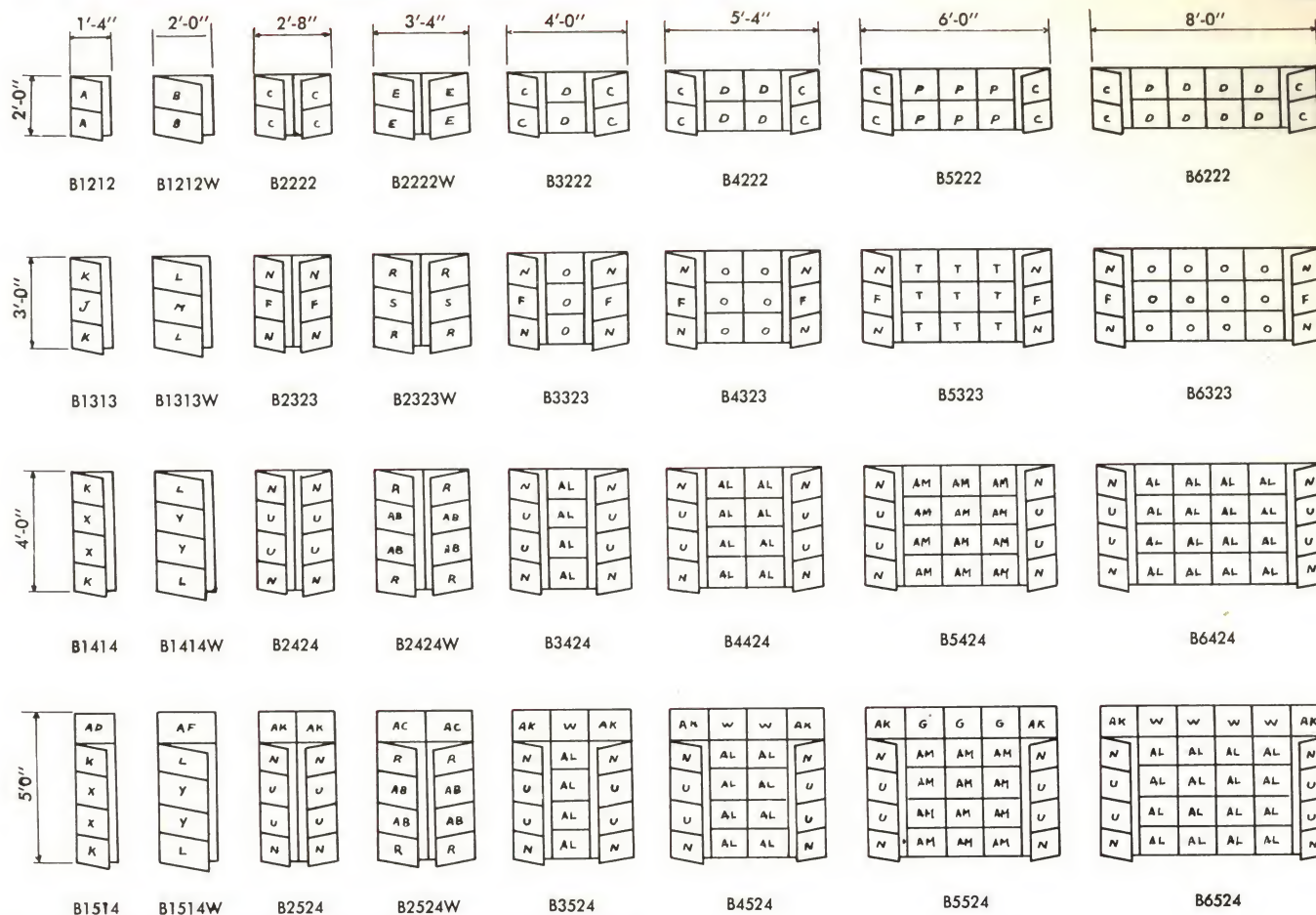
**STD.
GLASS SIZES**

- A - 15 3/4 x 11 1/4
- B - 15 3/4 x 12
- D - 17 1/4 x 12
- E - 14 3/8 x 11 1/8
- F - 14 3/8 x 15 1/8
- G - 14 3/8 x 19 1/8
- H - 32 1/2 x 10 3/16
- J - 16 x 14 3/4
- K - 14 3/4 x 14 3/4



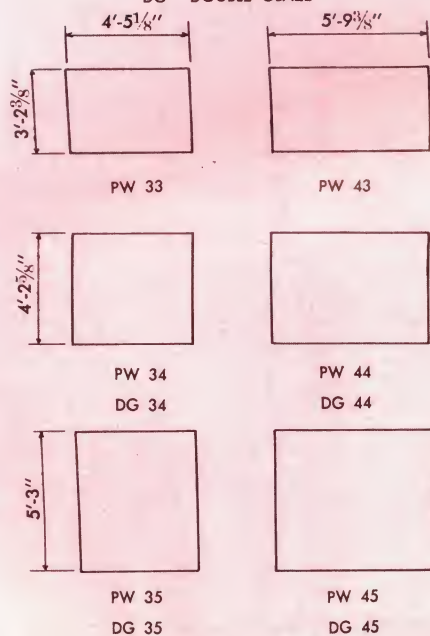
SUNBURST AVAILABLE IN ALL STD. WIDTHS





PICTURE WINDOWS

PW — SINGLE GLAZE
DG — DOUBLE GLAZE



GLASS SIZES FOR PW & DG

33 STD. GLASS 51 1/4 x 36 1/2	THERMOPANE OR EQUAL
43 STD. GLASS 67 1/2 x 36 1/2	
34 STD. GLASS 51 1/4 x 48 3/4	50 3/8 x 47 3/4
44 STD. GLASS 67 1/2 x 48 3/4	66 5/8 x 47 3/4
35 STD. GLASS 51 1/4 x 61 1/8	50 3/8 x 60 1/8
45 STD. GLASS 67 1/2 x 61 1/8	66 5/8 x 60 1/8

GLASS SIZES

A — 12 11/16 x 10 3/16	L — 20 11/16 x 10 1/2	X — 12 11/16 x 11 5/16
B — 20 11/16 x 10 3/16	M — 20 11/16 x 11 1/8	Y — 20 11/16 x 11 5/16
C — 13 1/4 x 10 3/16	N — 13 1/4 x 10 1/2	AB — 17 1/4 x 11 5/16
D — 15 5/8 x 10 7/8	O — 15 5/8 x 11 1/8	AC — 18 13/16 x 11 5/8
E — 17 1/4 x 10 3/16	P — 13 x 10 7/8	AD — 14 x 11 5/8
F — 13 1/4 x 11 1/8	R — 17 1/4 x 10 1/2	AF — 22 1/16 x 11 5/8
G — 13 x 11 1/8	S — 17 1/4 x 11 1/8	AK — 14 7/8 x 11 5/8
J — 12 11/16 x 11 1/8	T — 13 x 11 1/8	AL — 15 5/8 x 11 5/16
K — 12 11/16 x 10 1/2	U — 13 1/4 x 11 5/16	AM — 13 x 11 5/16
	W — 15 5/8 x 11 5/8	



Storm Window

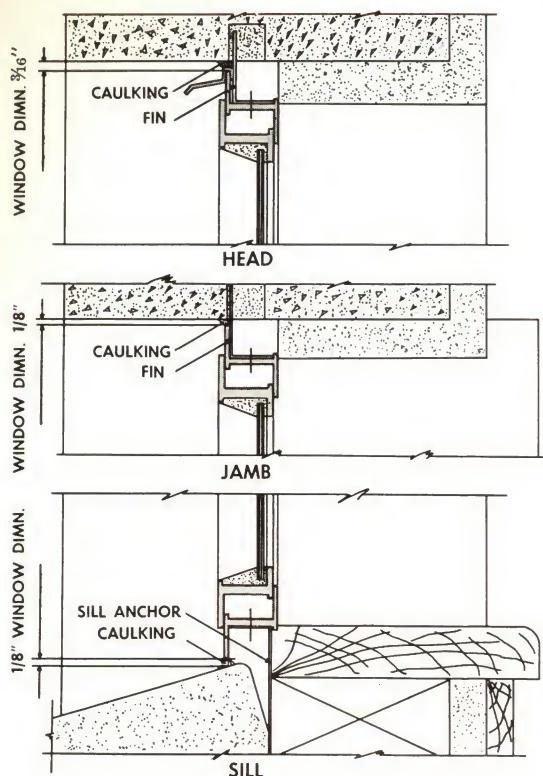
Note: Standard and Modular units with single ventilators may be hinged right or left.

Fixed units furnished for all sizes.

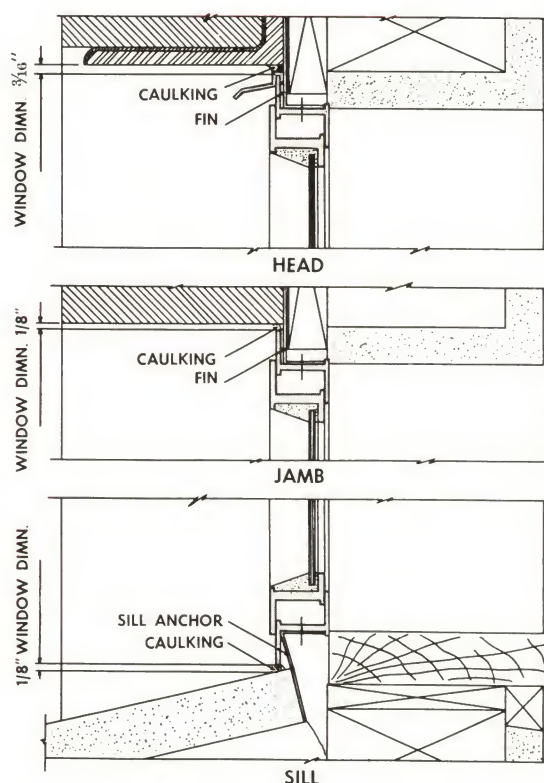
PW for single pane glazing (PW-33M, PW43M, PW35M, PW45M, PW34M, PW44M).

DG for 1" thick double insulated glass units in stock sizes. Not available in standard sizes for Modular Picture Window.

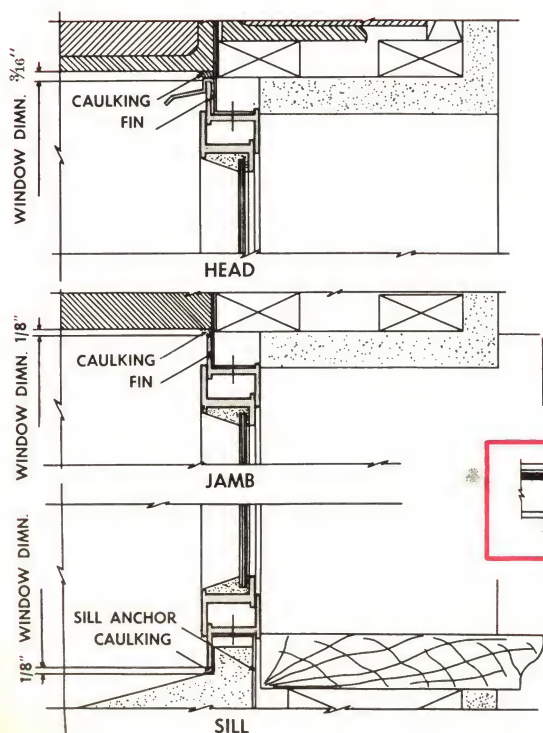
CONCRETE OR CONCRETE BLOCK



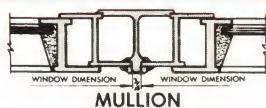
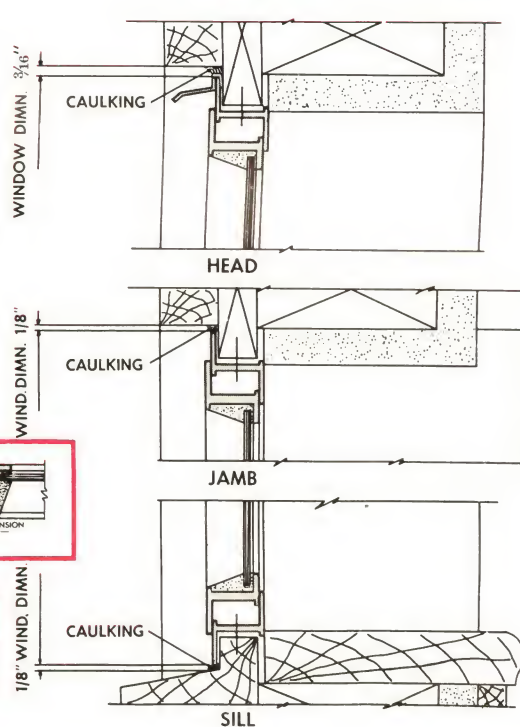
BRICK VENEER



SOLID BRICK



FRAME



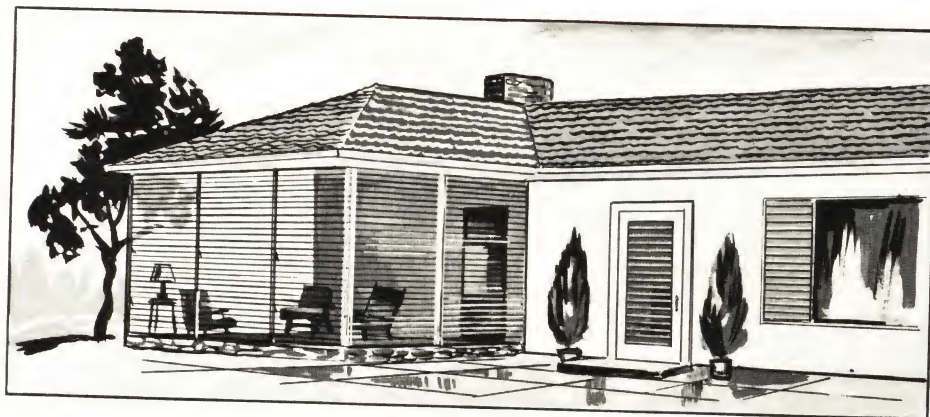
NOTE — Econ-O-Ware and Econ-O-Wall Installations Similar



WareTite Jalousies

perfected weatherstripping

5a
Wa



AS MODERN AS TOMORROW—Full vision; 100% Ventilation; Controlled Air Circulation; All Weather Protection.

DESIGNED FOR LONG LIFE, RUGGED WEAR AND MAXIMUM WEATHER PROTECTION.

IDEAL FOR — Prime Windows, Breezeways, Porch Enclosures, Sun Rooms, Bathroom and Kitchen Windows, Doors, Passageways.

STRUCTURALLY STRONG—For Schools, Hospitals, Commercial Construction.

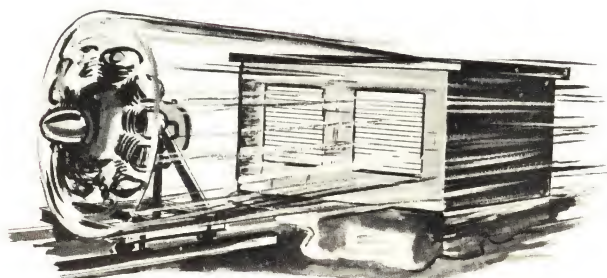
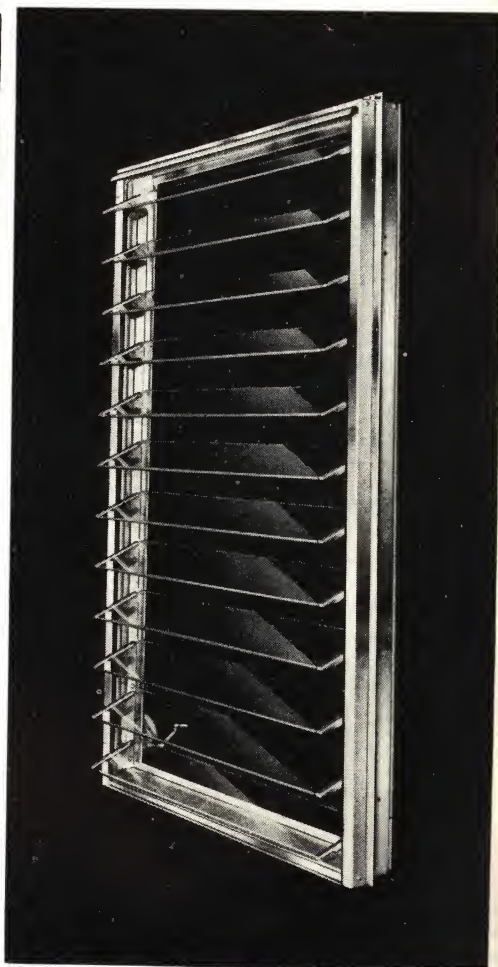
PERFECTED WEATHERSTRIPPING — Floating stainless steel weather cushion seals tight louvers at jambs . . . Koroseal weatherstripping at head and sill.

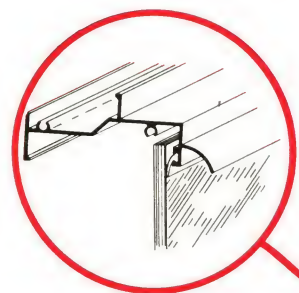
ALL WEATHER SECURITY — UNPARALLELED PERFORMANCE FOR JALOUSIE WINDOWS.

HURRICANE TEST — No water infiltration (0.00) 125 MPH — 20 gal. water per minute. (University of Miami, Housing Research Laboratory).

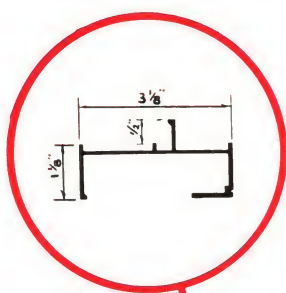
Static Air Pressure — Air Infiltration 0.114 CFM Wind Velocity equal 25 MPH. (Pittsburg Testing Laboratory)

Photostatic copy of above test available on request.





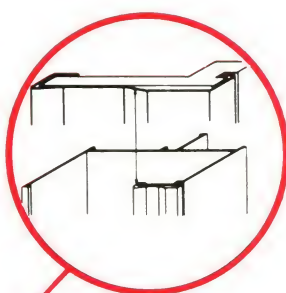
HEAD WEATHERING — Built in drip — extra weather guard at head of window. Durable plastic seals tight top louver against head of frame. Prevents water and air leakage.



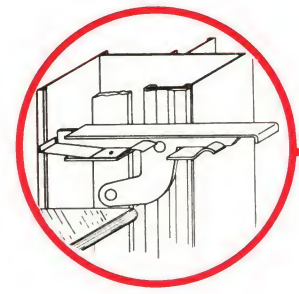
STURDY EXTRUDED FRAME — 3 1/8" depth. Precision engineered.



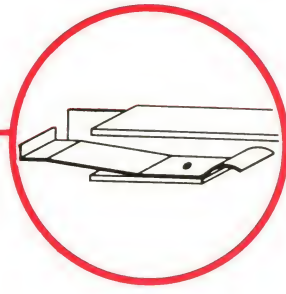
OVER 100° OPENING
Statistics show air circulation increased when 90° opening angle exceeded. Enables easy cleaning.



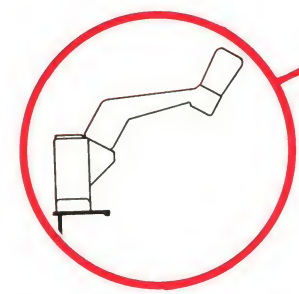
IMPROVED JAMB WEATHERING
Floating stainless steel weathering cushion seals tight louver contact at jambs.



BALANCED CONTROL
Synchronized and balanced control of glass louvers insures easy operation. Louvers seal with leverage.



SURE-LOCK LOUVER CLIP
Stainless steel slip-on clip locks glass in place from inside, prevents rattle, chipping.



ATTRACTIVE HEAVY DUTY ROTO OPERATOR
Finger tip operation. Positive locking.



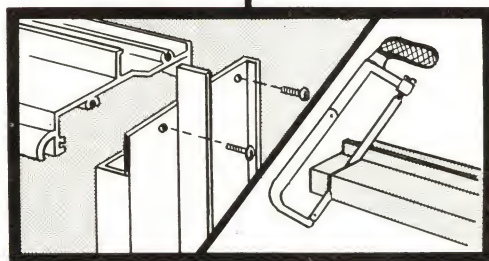
FLUSH SLOPING SILL
Prevents dirt trap. Allows easy cleaning.



SILL WEATHERSTRIPPED
Durable plastic inset in channel seals tight bottom louver at sill.



INSERTED SCREEN
Screen lip overlaps frame for perfect fit and protection. Corners reinforced by aluminum angles. Functional barrel type swivel clip.



**QUICK EASY ASSEMBLY
SHIPPED KD**

Only 8 screws and a screwdriver required.

FLEXIBLE STOCK

Interchangeable jambs and sills

ADJUSTABLE WIDTHS — A saving in special window cost. On the job reduction of widths.

SPACE SAVER — One average size unit occupies approximately 1/2 cu. foot of valuable warehouse space.

LUSTROUS FINISH

Chemically cleaned, etched and lacquered per FHA specifications

SPECIFICATIONS

GENERAL: Ware Tite Glass Jalousies of types and sizes shown shall be complete with equipment and hardware as herein specified as manufactured by Ware Laboratories. Specifications hereafter to include all glass, screens and hardware.

MATERIAL: Ware Tite frame members shall be extruded structural Aluminum Alloy 63S-T5, Exceeding 3" in depth. Operating Bars to be of 62S-T6.

CONSTRUCTION: Ware Tite frame members shall be processed to permit accurate assembly of all fittings. Frame corners shall be assembled with Sheet Metal Screws to assure a strong mechanical joint and also to permit shipment in a knocked down condition. Glass clips shall be a strong, formed special aluminum alloy with stainless steel clip at top of glass to provide pressure, thus eliminating breakage, rattle of glass, etc. Louvers to be 4 1/2" in width. All louvers to show 7/16" glass to glass overlap. Clips shall be attached to operator bars by means of shoulder rivets to assure positive, silent opening and closing.

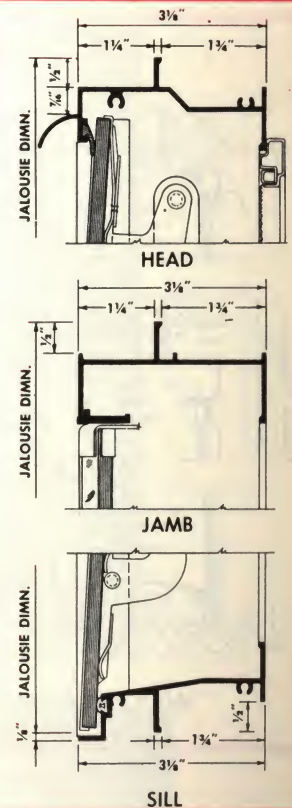
HARDWARE: Operator shall be die cast aluminum with heavy-duty arm to provide ease of operation in opening and closing of glass louvers. Operator shall be accessible without removing the screen and provisions for installation shall be made at the factory in accordance with manufacturer's standard design.

WEATHERSTRIPPING: Head and Sill shall be completely weatherstripped with Koroseal or elastomeric vinyl or equal. Rubber or rubber composition shall not be used. Metal weatherstripping will be installed the full length of the jambs, thus providing a seal around the entire perimeter of the Jalousies.

ERECTION: Erection shall be included under another contract in accordance with manufacturer's recommended details and/or approval of the supervising architect. All mastic or caulking used in erection shall be of a type suitable for use with Aluminum Ware Tite Glass Jalousies.

5a
Wa

DIMENSIONS



SCHEDULE OF SIZES

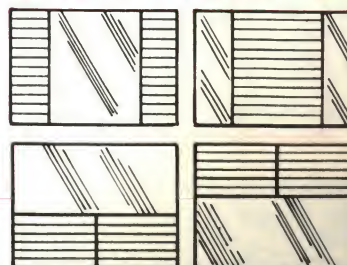
	19 1/8"	26 1/2"	37"	53 1/2"	69 3/8"	74 1/2"	111 1/4"
26	12	12A	22	32	42	2/22	3/22
38 1/4"	13	13A	23	33	43	2/23	3/23
50 1/4"	14	14A	24	34	44	2/24	3/24
63	15	15A	25	35	45	2/25	3/25
75	16	16A	26	36	46	2/26	3/26

ADDITIONAL STANDARD SIZES

17	19 1/8" x 87 3/16"
18	19 1/8" x 99 3/8"
17A	26 1/2" x 87 3/16"
18A	26 1/2" x 99 3/8"
27	37" x 87 3/16"
28	37" x 99 3/8"
37	53 1/8" x 87 3/16"
38	53 1/8" x 99 3/8"
47	69 3/8" x 87 3/16"
48	69 3/8" x 99 3/8"
2/27	74 1/8" x 87 3/16"
2/28	74 1/8" x 99 3/8"
3/27	111 1/4" x 87 3/16"
3/28	111 1/4" x 99 3/8"

Above sizes are over-all. To obtain buck dimensions, deduct 1". (See above sectional drawing.) Windows over 37" wide shown above have continuous head and sill members with meeting rail. (Detail shown on back cover.)

ATTRACTIVE COMBINATIONS



STORM SASH



WARETITE JALOUSIE DOORS



SPECIFICATIONS:

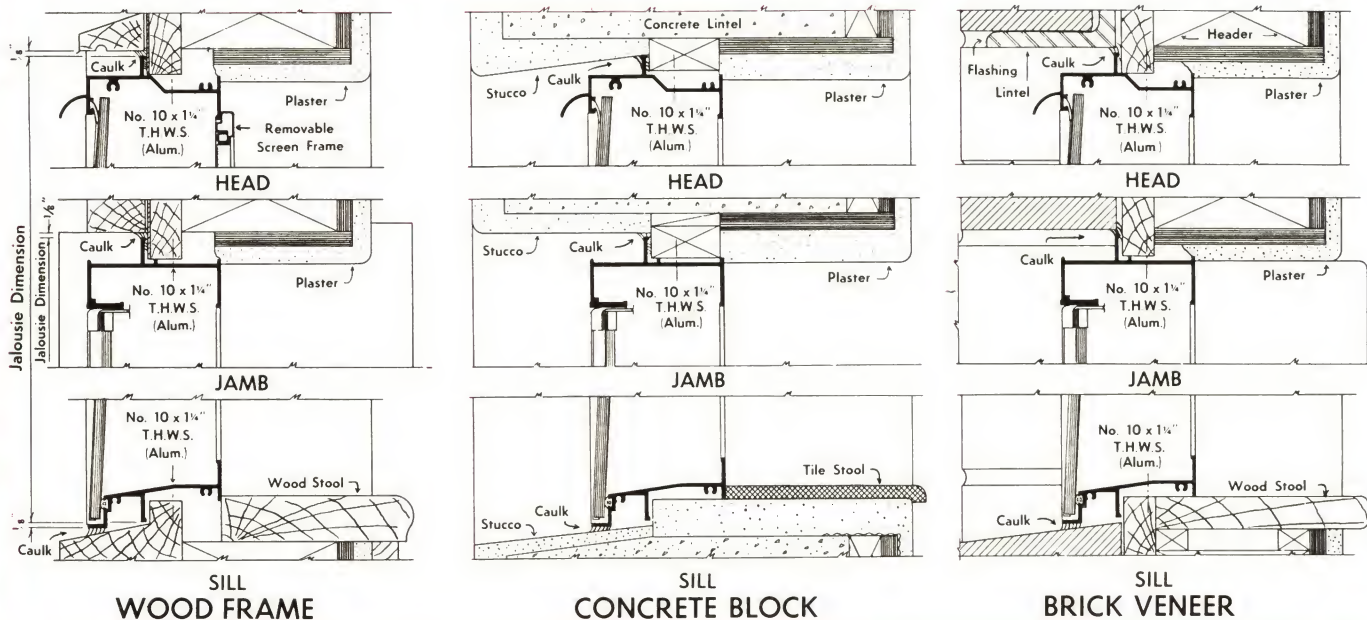
1 3/4" thick vertical grain fir, furnished with 15 glass louvers.

Door Size	Insert Size
2'-6" x 6'-8"	20" x 63"
2'-6" x 7'-0"	20" x 63"
2'-8" x 6'-8"	22" x 63"
2'-8" x 7'-0"	22" x 63"
3'-0" x 6'-8"	26" x 63"
3'-0" x 7'-0"	26" x 63"

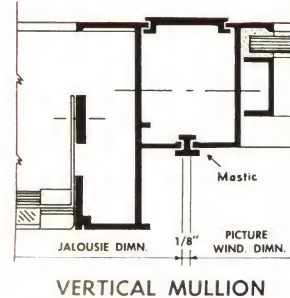
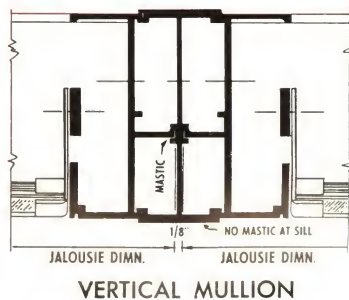
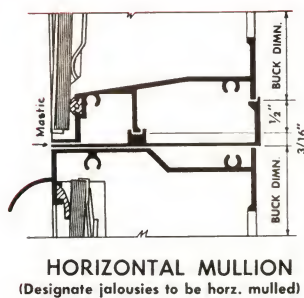
NOTE: Above sizes are overall. Deduct 1" Buck Dimension.

STORM SASH INTERCHANGEABLE WITH SCREENS - QUICK - EASY

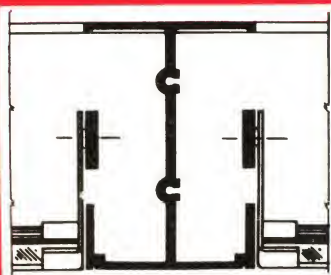
INSTALLATION DETAILS



MULLIONS



MEETING RAIL



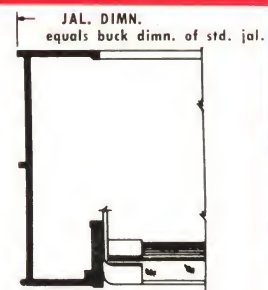
(Furnished for all std. windows over 37\"/>

SPECIAL FLUSH HEAD



AVAILABLE ON REQUEST
(NOT STANDARD)

SPECIAL FLUSH JAMB



Available on request
(Not Standard)





Grady Memorial Hospital, Atlanta, Ga.
Robert and Company Associates, Architects and Engineers
Robert E. McKee General Contractor, Inc.

Designed and manufactured to meet the most rigid requirements of monumental construction for an aluminum awning type window. Engineering experience, architectural consultation, exhaustive tests and studies have culminated in an aluminum window manufactured to last the life of any building with maximum trouble-free performance.

WORK INCLUDED: Windows shall be Ware Aluminum Monumental Weather-stripped Awning type as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operation, appearance and service), and shall be furnished complete with hardware and all standard erection fittings.

MATERIAL: Frame and ventilators shall be of solid extruded aluminum alloy 63S-T5, mill finish. No section of the ventilator members shall be less than 1 5/8" deep. (Commercial tolerances observed.) All structural parts of window shall be a thickness of no less than 1/8". At no point shall the frame section be less than 3 7/16" deep. At the sill the minimum depth shall be 6 5/8". (Commercial tolerances observed.)

CONSTRUCTION: The sill and jamb of frame will be welded. The head and intermediate frame members will be mortised and tenoned. The top and bottom members of all ventilators joined to the side rails by mortise and tenon joints and shall be air-hammer riveted in a satisfactory and workmanlike manner. The ventilator will have a minimum opening of 70°. The top ventilator and all others will drop sufficiently for easy cleaning from the inside. The vent brackets will be of solid aluminum alloy 52S-H32, 3/16" thick. All linkage pins will be of high strength aluminum alloy 7/16" diameter running in nylon bushings. The Pitman bar will be a channel or flat shaped section. It will be of solid extruded aluminum alloy 62S-T6. All linkage will be bushed with nylon bushings.

HARDWARE: All windows will be operated by a monumental compound operator. The body of the operator will be diecast in two parts of ALCOA alloy #208 with a tensile strength of 45,000 pounds. The crank will be made of white bronze with an attractive formed knob handle with turns 1/2", hex shaft press fit into 7/8" pitch diameter carbon steel worm. This worm will mesh with 36 tooth bronze worm gear which is part of a cluster consisting of bronze worm wheel and a 15 tooth spur gear. The 15 tooth spur gear — 3/8" space, meshes with a quadrant of a 40 tooth spur gear — 3/8" face, keyed to the transverse tube. All moving parts are bushed from the shaft or side walls of the housing by molded nylon bushings or washers. The operator has a positive stop in both directions, preventing gear stripping. The operator housing shall be grease-tight to protect worm and gears that shall be packed in grease. The operator box will be mounted in the sill by 1/4 - 20 machine screws into stainless steel inserts. The operator will be housed entirely in the sill except for the worm boss which will protrude at the inside center of the window. Easy access to or removal of the operator can be made by removal of the sill cover plate which will be held in place by screws.

The transverse power tube shall have a minimum diameter of 1 5/16" made from round aluminum extruded and drawn tubing with 1/8" wall, alloy 63S-T832. The outer ends of the transverse tube are held in place and turn in an out-board bearing, nylon bushed, mounted on the jambs of the window. Each end of the transverse tube aluminum arms is keyed. Suitable connecting linkage of aluminum alloy (62S-T6) connect the arms on the tube to vertically movable Pitman bars, to which the head of all vents is attached by means of a bracket from the vent and attached to the Pitman by a pin 7/16" diameter. The vents are attached to the window by means of links or hinge arms, one end of which is attached to the side of the vents and the other end attached to the jamb of the window. As the head of the vents is raised or lowered by means of the vertically moving Pitman the vents rock on the hinge arms swinging the lower part of the vents either away from the window or closing tight against the window frame and the mating section of the vent above and below.

Adjustment for tight closing or weathering is accomplished by means of an eccentric located at the point where the hinge arm attaches to the jamb of the window. This adjustment is simple and is easily made after the window has been installed in the building and should be made before glazing. However, although this adjustment should be permanent it can be made whenever necessary.

PROTECTIVE COATING: All windows shall be chemically cleaned to remove fabrication compounds and dirt accumulations, etc., and be given a protective coating of a clear waterwhite methacrylate lacquer. This lacquer when applied on the aluminum surface must be such as to withstand the section of lime mortar for a period of at least one month at an atmosphere of 100% relative humidity at room temperature.

ERECTION: All openings must be fully prepared to receive the aluminum windows and installation must not be started until all other work around the opening is first completed. The window shall be set plumb and true and imbedded in a water-proof mastic and thoroughly caulked.

All vents shall be adjusted before glazing for smooth operation and tight contact.

SCREENS: Shall be of extruded and/or rolled section aluminum frames mitered and joined by aluminum corner angles. Screen cloth shall be 18/14 mesh and held in place by aluminum splines or other satisfactory material.

GLAZING: All windows shall be glazed on the outside and shall be well back-puttied and then face-puttied. Aluminum sash putty or compound of No. 1 commercial grade shall be furnished and used by the glazier.

FEATURES OF DISTINCTION

- **PERFECTED WEATHERING** — Koroseal weatherstripping imbedded in extruded channel, perfect seating of ventilators with wide overlap in frame contact.
- **HEAVY EXTRUDED SECTIONS** — 1 5/8" ventilator depth. Minimum thickness of all structural members 1/8".
- **ALL MOVING PARTS** bushed in self-lubricating nylon. All linkage tested for maximum load conditions.
- **ACCESSIBILITY** — All moving parts easily accessible.
- **EASE OF OPERATION** — Perfect balance and gear ratio permits finger tip control.
- **STRIP PROOF HEAVY COMPOUND OPERATOR** concealed in sill, synchronized distribution of load, unparalleled load safety factor for aluminum awning windows.
- **RIGID FRICTION FREE VENTILATORS** — Head of ventilator operates in individual track attached to frame joint.
- **ADJUSTMENT** — Individual ventilator adjusted by an eccentric if ever necessary.
- **HARDWARE** — Solid white bronze attractively designed tilted crank for operating vents. Solid white bronze cam lock and latch for hopper vents.
- **WATER TRAP** — Functional water trap prevents any water striking jamb of window from entering sill when ventilators are in an open position.



DETENTION AND INSECT SCREENS — Adaptable directly to frame of window without interfering with operator.

GLAZING — Accommodates single or 1/2" double glass.

ADAPTABILITY WITH ECONOMY — Because of the structural strength of frame and vent members and powerful compound operator, windows are adaptable to unusually large openings with efficient operation.

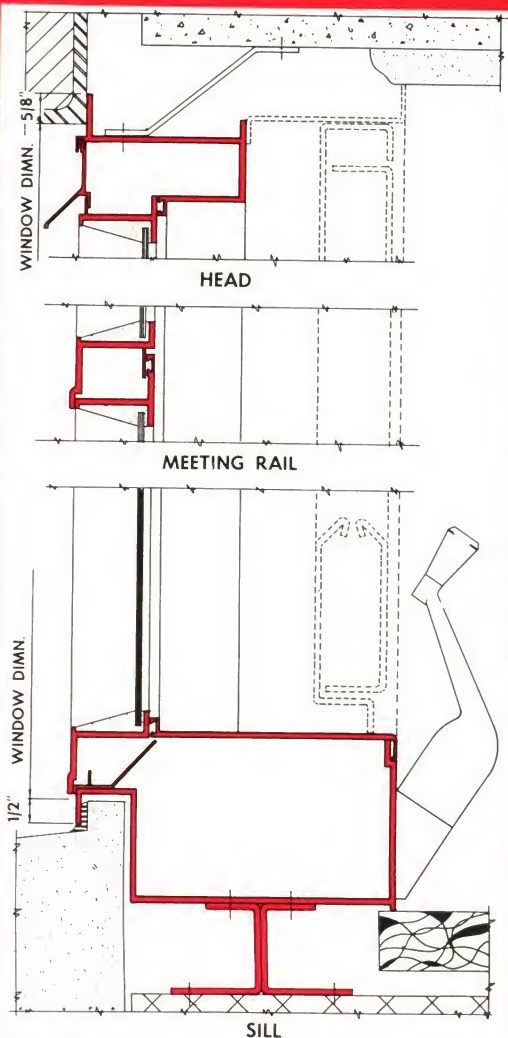
ALUMINUM TRIM — Attractive trim adjustable to fit special conditions.

USAGE
HOSPITALS (General and Psychiatric)
MUNICIPAL AND OFFICE BUILDINGS
INSTITUTIONS
SCHOOLS

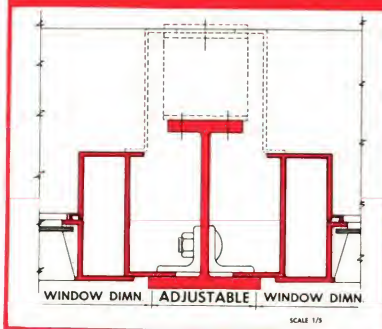
FURNISHED ON REQUEST: • FULL SIZE WORKING DETAILS • DETAILS PREPARED FOR SPECIAL CONDITIONS • STANDARD OR CUSTOM SIZES, WITH OR WITHOUT TRIM, TO MEET THE HIGHEST STANDARDS OF MONUMENTAL CONSTRUCTION.

(weatherstripped)

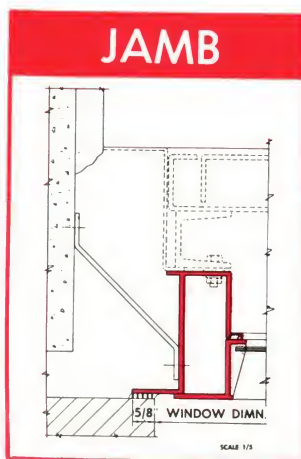
SCALE 1/4



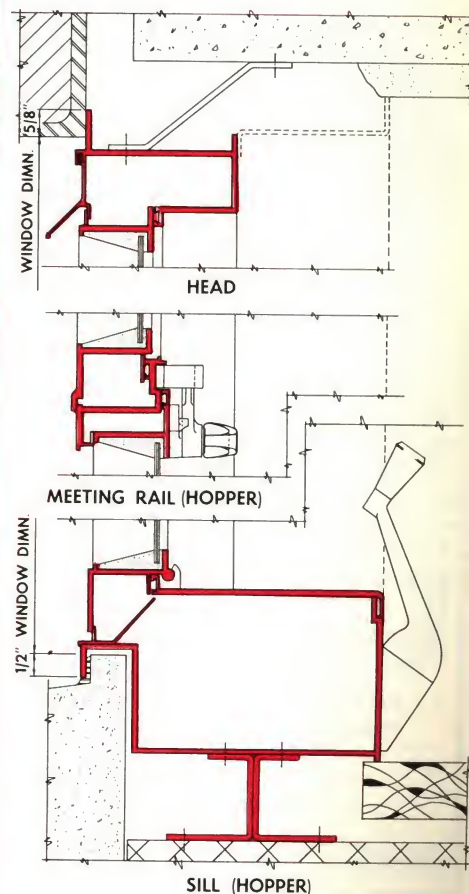
MULLION



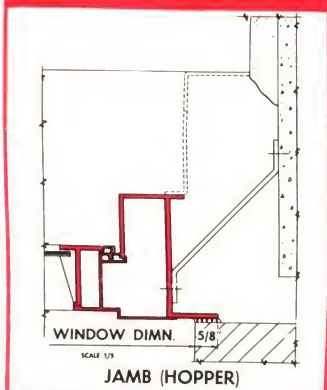
JAMB



SCALE 1/4



JAMB



STANDARD SIZES

Special sizes on request
Fixed lights optional

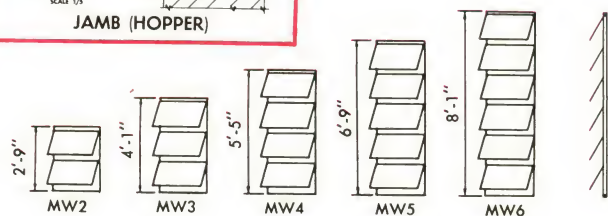
WIDTHS ALL TYPES

2'-0⁷/₈"
2'-8⁷/₈"
3'-4⁷/₈"
3'-8⁷/₈"
4'-0⁷/₈"

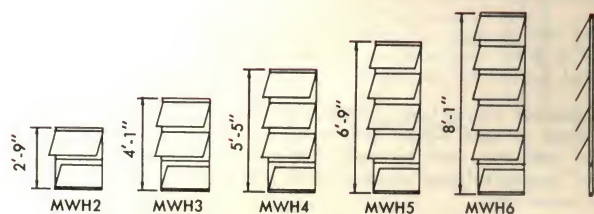
OPERATOR



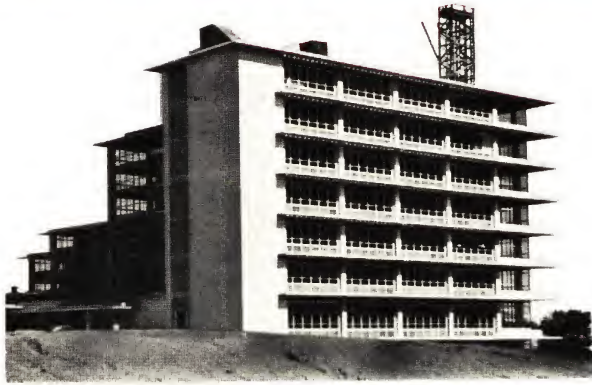
**Compound Operator
Enclosed in Sill**



DIMENSIONS SHOWN ARE OPENING DIMENSIONS



UNITS SHOWN VIEWED FROM OUTSIDE



University of Arkansas Medical Center
Architects: Erhart, Eichenbaum & Rauch.
Edward D. Stone, Associate.
Contractor: W. R. Grimshaw



Workmen easily handle the sturdy, lightweight Ware wall sections which substantially reduces installation time.

These pictures clearly demonstrate how the use of floor height aluminum windows can cut installation costs, reduce maintenance, and effect many other construction savings. They show how these Ware pre-fab units of aluminum and glass actually form the walls of this monumental structure. 20'-4" bays are made from muller 3'-3 1/2" x 11'-5 3/4" Ware factory units. Two ventilators — one at the top and one immediately above the sill are controlled by a built-in center operator at sill height. The large center lite is fixed. From the sill to the base of the window an aluminum spandrel is installed in the window frame on the job.

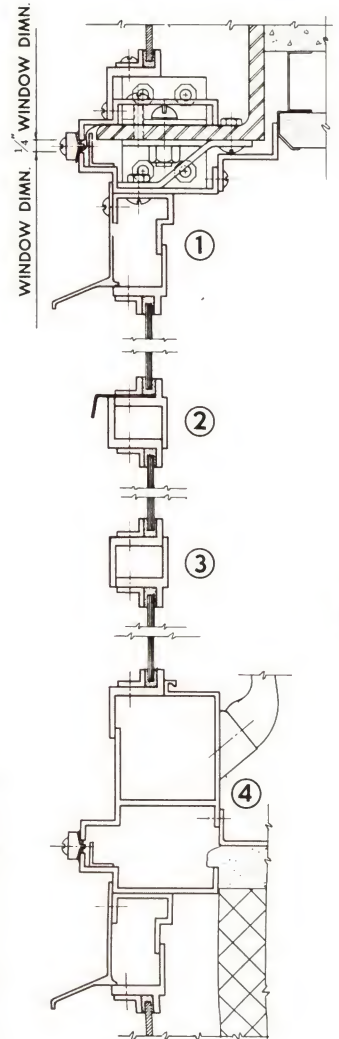
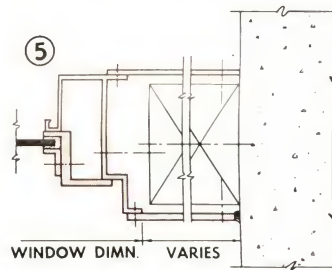
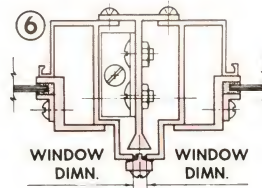
CURTAIN WALLS DESIGNED TO MEET SPECIAL REQUIREMENTS

Suggested details available on request



GENERAL SPECIFICATIONS

- **Strength of Sections:** All members shall be of sufficient strength to perform the functions for which the window was intended. Frame and ventilator members will be of 635-T5 aluminum. All mechanism will be of aluminum or other non-ferrous metals.
- **Windows** will be of sufficient strength to take either single or double glazing, and designed for use of glazing compound, neoprene, or metal glazing beads.
- **Ventilators** can be removed and replaced if ever necessary by simple means.
- **Frame** is designed to enable leakproof type of installation against metal surrounds, masonry or spandrels.
- **Concealed locking device** in jamb of frame is not removable when ventilator is in an open position. Visual indication that ventilator is in a locked position will be shown.
- **Double neoprene friction type weatherstripping** inset on inside perimeter of frame prevents water infiltration at winds of 125 miles per hour. Air infiltration will be well within allowances for "Quality Approved" weatherstripped windows of the Aluminum Window Manufacturers Association.



DETAILS 1/4 SCALE

REVERSIBLE

For masonry openings and curtain wall construction

DOUBLE WEATHERSTRIPPED

Double neoprene friction type weatherstripping
Exclusive locking device
Heavy monumental construction

Window reverses in instant by pivoting on stainless steel pins in bronze bushings at top and bottom.

MAINTENANCE MINIMIZED

Easy cleaning — Reversing outside glass surface to inside enables fast, safe and economical cleaning and many dollars saved during life of building.

Ideal for air conditioned buildings — No loss of air.

Window locked into position can be opened only by a special key.

Closed during cleaning — Window does not remain open to disturb efficiency of air conditioning system.

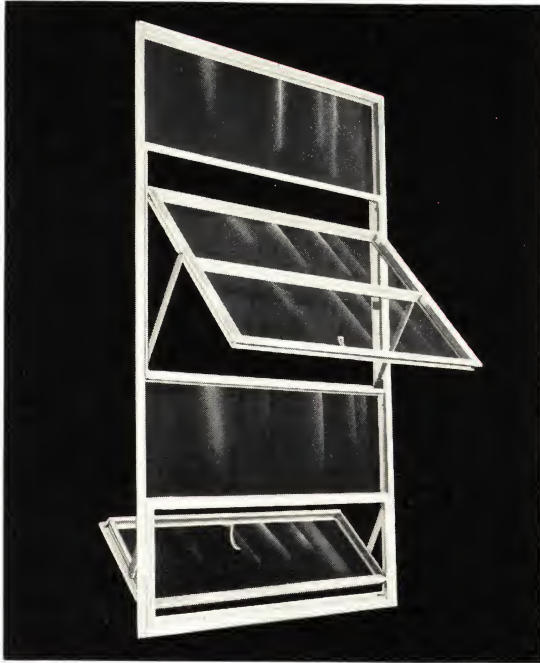


projected windows

for hospitals — schools
commercial & residential construction

5a
Wa

ARCHITECTURAL — INTERMEDIATE



specifications

WORK INCLUDED: Windows shall be Ware Projected Windows as herein specified (or with design and/or engineering changes which will provide the user with equal or superior operation, appearance and service), and shall be furnished complete with hardware and all standard erection fittings.

MATERIAL: Frame and sash members shall be solid extruded aluminum alloy 63S-T5, mill finish, and shall not be less than $\frac{1}{8}$ " in thickness. Outside frame members shall be $1\frac{1}{2}$ " and $1\frac{3}{8}$ " deep horizontally. Combined frame and vent depth horizontally shall be $1\frac{3}{4}$ " and vertically $2\frac{1}{2}$ " minimum. Sections provide for weatherstripping if desired.

CONSTRUCTION: Corners of outside frame, sill of Projected Out vent, head of Projected In vents, and muntins shall be mortised and tenoned construction, securely riveted to provide tight rigid connection. Head of Projected Out vent and sill of Projected In vents is secured to vertical members by the bracket carrying the sliding shoes and are securely riveted for strength and form a rigid square corner. Vents (Project In and Project Out) provide three point metal contact in non-weatherstripped windows. Minimum overlap at jambs and sill of (Project Out) vents, and head, sill and jamb of (Project In) vents $\frac{1}{16}$ ". Vents are provided with sliding shoes, concealed spring and balance arms which positions the vents up to 50° opening.



WEATHERSTRIPPED PROJECTED WINDOW

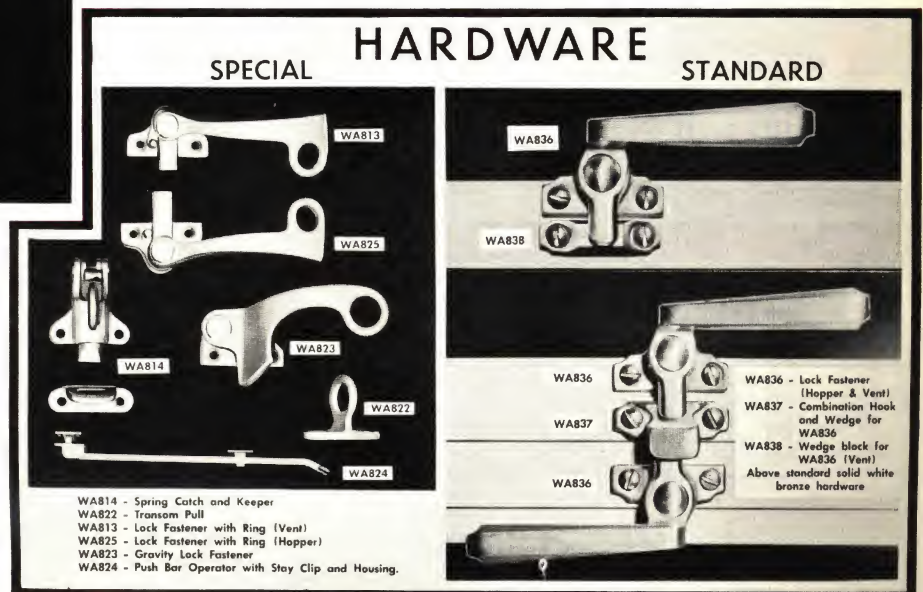
PITTSBURGH TESTING LABORATORIES:
0.11 CFM UNDER STATIC AIR PRESSURE EQUAL
25 MPH WIND VELOCITY.

A NEW IMPROVED PROJECTED WINDOW

● SELECTIVE WEATHERING

1. Three point metal to metal contact weathering qualities exceeding ordinary standards.
2. Weatherstripped — Lifetime, built-in weathering a positive seal where the most rigid air control conditions are demanded. A money saver for heating and air conditioning systems.

- DOUBLE GLAZING WITHOUT ADAPTERS
- INSIDE OR OUTSIDE GLAZING
- RUGGED MONUMENTAL CONSTRUCTION
- FRICTION SHOE WITH PRESSURE SPRING FULLY ENCLOSED
- REINFORCED CORNER AT PIVOT POINTS
- SIMPLICITY OF DESIGN INSURES TROUBLE-FREE LIFE



MULLIONS: "T" Mullion, adjustable from $2\frac{3}{8}$ " to $3\frac{1}{8}$ ", available complete with inside covers at a slight extra cost. Standard plate mullions can be furnished for windows up to 5'-5" in height.

SCREENS: All windows are prepared for screens. Projected Out vents are screened on inside, either with or without wickets. (Without wicket requires under screen operation). Projected In vents are outside screened, removable from the inside. Screen cloth is aluminum 14/18 mesh.

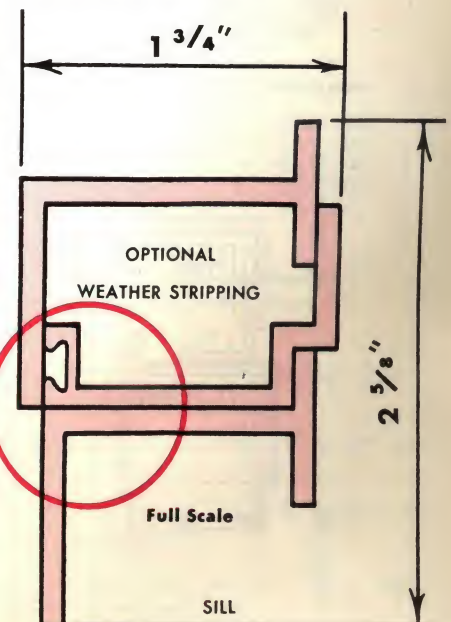
HARDWARE: Standard hardware shall consist of cam handles unless otherwise specified. Other types available on request. All hardware furnished with durable lacquer finish. Vents over 2'-8 $\frac{3}{8}$ " wide must have vertical muntin when windows are equipped for pole operation. Standard anchors and clips of aluminum or plated steel.

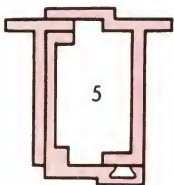
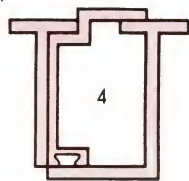
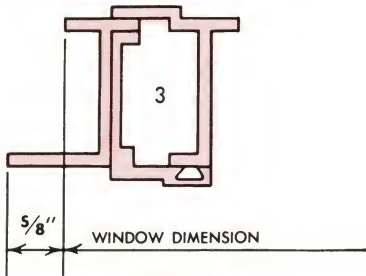
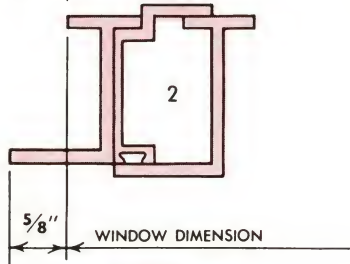
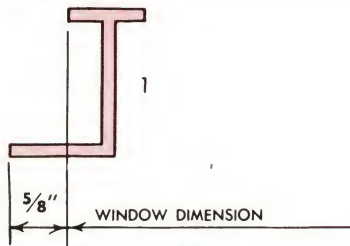
GLAZING: Either outside or inside — specify which is desired. Stock windows are outside glaze. Inside glaze will be made to order. Glazing compound and clips are not furnished.

WEATHERSTRIPPING: Available for all windows at an extra cost.

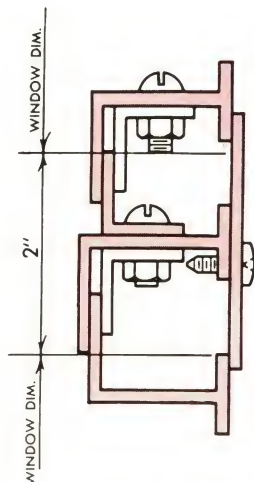
PROTECTIVE COATING: Chemically cleaned and lacquered per FHA specifications.

A SUPERIOR WINDOW DESIGNED AND BUILT TO MEET TODAY'S EXACTING SPECIFICATIONS

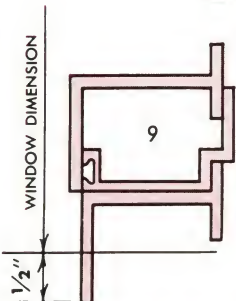
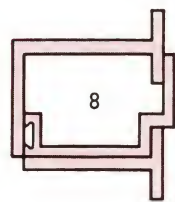
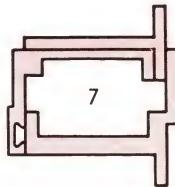
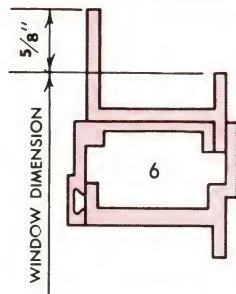




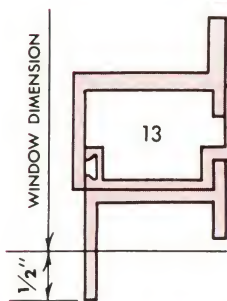
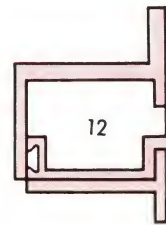
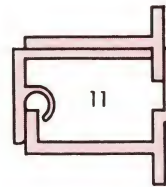
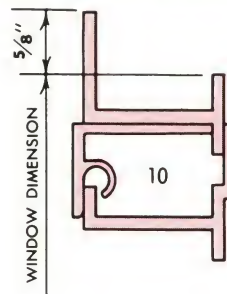
HORIZONTAL SECTION



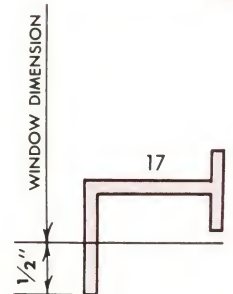
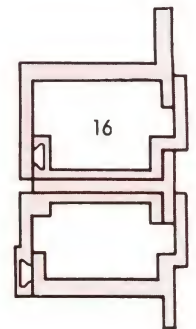
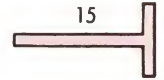
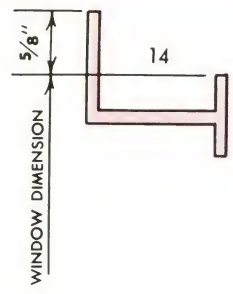
HORIZONTAL MULLION



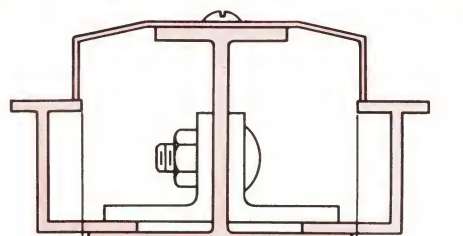
VERTICAL HOPPER SECTION



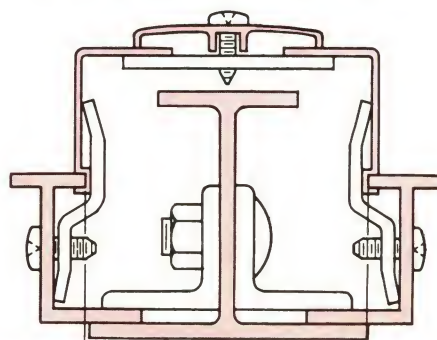
VERTICAL VENT SECTION



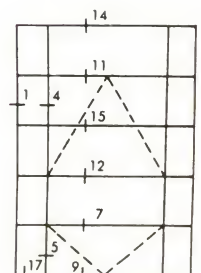
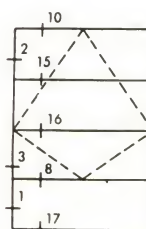
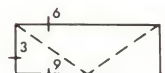
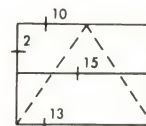
VERTICAL FIXED SECTION AND MEETING RAIL



DETAIL OF ONE PIECE MULLION COVER
2 3/8" TO 3 1/8" WINDOW DIM.



VERTICAL MULLION
2 3/8" TO 3 1/8" WINDOW DIM.



OPERATING

2' 0 7/8"	2' 8 7/8"	3' 4 7/8"	3' 8 7/8"	4' 0 7/8"	5' 0 7/8"
 P-411	 P-421	 P-431	 P-441	 P-451	 P-461
 P-412	 P-422	 P-432	 P-442	 P-452	 P-462
 P-413	 P-423	 P-433	 P-443	 P-453	 P-463
 P-413H	 P-423H	 P-433H	 P-443H	 P-453H	 P-463H
 P-414	 P-424	 P-434	 P-444	 P-454	 P-464
 P-414H	 P-424H	 P-434H	 P-444H	 P-454H	 P-464H
 P-415H	 P-425H	 P-435-H	 P-445H	 P-455H	 P-465H
 P-416H	 P-426H	 P-436H	 P-446H	 P-456H	 P-466H
 P-417H	 P-427H	 P-437H	 P-447H	 P-457H	 P-467H

HORIZONTAL MUNTIN SERIES

FIXED

2' 0 7/8"	2' 8 7/8"	3' 4 7/8"	3' 8 7/8"	4' 0 7/8"	5' 0 7/8"
 411F	 421F	 431F	 441F	 451F	 461F
 412F	 422F	 432F	 442F	 452F	 462F
 413F	 423F	 433F	 443F	 453F	 463F
 414F	 424F	 434F	 444F	 454F	 464F
 415F	 425F	 435F	 445F	 455F	 465F
 416F	 426F	 436F	 446F	 456F	 466F
 417F	 427F	 437F	 447F	 457F	 467F

GLASS SIZES

A — 21 1/2 x 13 3/4	F — 9 3/4 x 15 3/4	N — 23 3/8 x 15 3/4
B — 29 1/2 x 13 3/4	G — 21 1/4 x 14 1/2	O — 31 3/8 x 15 3/4
C — 37 1/2 x 13 3/4	H — 29 1/4 x 14 1/2	P — 39 3/8 x 15 3/4
D — 41 1/2 x 13 3/4	J — 37 1/4 x 14 1/2	R — 43 3/8 x 15 3/4
E — 45 1/2 x 13 3/4	K — 41 1/4 x 14 1/2	S — 47 3/8 x 15 3/4
	L — 45 1/4 x 14 1/2	

For vertical muntin series deduct 3/8" from width of the glass sizes shown above and divide by two (2).



Standard Screen
vertical wicket



Special Screen
horizontal wicket



project-out



project-in

- Vents shown as projecting-out may be made to project-in if all other vents in window project-in.
- Vertical muntins may be added based on 20" or 24" bar centers on special orders.
- All units are prepared for screens. Wicket screens for project-out and fixed for project-in.
- Designate hardware desired when beyond hand reach or standard hardware will be furnished.



ATLANTA

629 East College Ave.
Decatur, Ga.



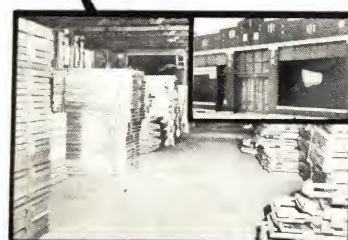
HOUSTON

6309 Long Drive
Houston, Texas



NEWARK

128 Emmett St.
Newark, New Jersey



CHICAGO

5815 W. North Ave.
Chicago, Illinois

SERVICE

Stock Availability — Branch Warehouses with large stocks of standard sizes are strategically located to insure the finest possible service for our customers.

QUALITY AND PERFORMANCE

The meaning of these words is partially responsible for the increasing acceptance of Ware windows by Architects and Contractors throughout the United States and Foreign Countries.

Your Local Representative

Aluminum **WARE** *Windows*



Jalousie



Econ-O-Wall



Econ-O-Ware
Awning



Intermediate
Awning



Projected



Casements

Ware Laboratories, Inc., 3700 N.W. 25th St., Miami, Florida